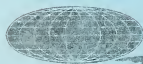


212-552/11



International Standardization

*Testing, Certification and
Related Matters, and Their
Implications Under
Trade Agreements Act of 1979*



International Standardization


Trade Agreements Act of 1979
Implications Under
Related Matters, and Their
Testing, Certification and



International Standardization



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FOREWORD

This is a report on the first major public conference of the United States Department of Commerce on the subject of international standardization and related matters.

The proximal causes for holding the conference were twofold. One was the Trade Agreements Act of 1979 which mandated a number of actions by the government and affecting the private sector that needed to be clarified in the light of existing situations, as well as pragmatic problems in attempting to comply with provisions of that statute. The other was the strong recommendation made to the Department by William T. Cavanaugh, President of the American Society for Testing and Materials (ASTM), in his opening address at the Forum on International Standardization which that organization held in Philadelphia on May 28, 1980. In his concluding remarks Mr. Cavanaugh declared:

"...we urge the Department of Commerce to initiate a major conference programmed to surface the major issues involved and the probabilities concerning those issues. This conference should be attended by representatives of all the organizational and subject matter relationships both in and outside of government. It should include those with special knowledge about standards, about world trade, about international marketing, about the activities of the treaty organizations active in this arena. Only in this way can we come to a consensus on the sense of direction we so desperately need."

Actually, the need and the momentum for holding such a conference had been building up for several years, but the Cavanaugh recommendation served as the catalyst to do promptly what the Department's Office of Product Standards Policy had been contemplating for some time.


In May 1977 the American National Standards Institute (ANSI) published a report, "Voluntary (Private Sector) Standards Programs and the GATT Code," on "implementing provisions of the proposed standards code of the General Agreement on Tariffs and Trade (GATT) that relate to the voluntary (Private Sector) standards and related activities." That report was issued in accordance with ANSI/DoC Contract No. 6-35789 whose purpose was described as being "to provide the U.S. Government with a comprehensive plan for implementing the private sector standards provisions of the draft GATT Code of Conduct for Prevention of Technical Barriers to Trade." A number of major and subsidiary recommendations for actions by the Department of Commerce and by ANSI were made in that report which merited further consideration in view of the GATT Standards Code, as published, and of Title IV of the Trade Agreements Act of 1979.

In 1978 two other relevant studies were made. One was "A Report on the Implementation of the GATT Standards Code in Federal Agencies," prepared by a task force of the International Standards Subcommittee of the Interagency Committee on Standards Policy chartered by the Department of Commerce. Another was "Implementation of the GATT Standards Code by State and Local Government," a report on the implications for state and local government of the implementation of the proposed GATT Code of Conduct for Preventing Technical Barriers to Trade," prepared by Public Technology, Inc. for the Office of the Special Representative for Trade Negotiations. Both of these reports contained recommendations which deserved additional review in the light of the final version of the GATT Standards Code and Title IV of the Trade Agreements Act of 1979.

The ANSI report's recommendations had, to a large extent, been analyzed at a meeting of leaders of the major voluntary standards organizations and Department of Commerce executives concerned with the voluntary standards system in a meeting which the Department's Office of Product Standards held on December 16, 1977. Minutes of that meeting indicate a clear and urgent need to get the private sector and the government working together to plan a comprehensive and effective program for dealing with present problems concerning the international standardization interests of the United States, as well as those problems which were obviously going to develop in the near future. A principal concern was very apparent: clarification was needed regarding the nature of the specific roles of the government and the private sector, especially in view of the major challenges that the U.S. faces in international standardization/trade and related matters.

When the ASTM Committee on International Standardization was organized I suggested that its first order of business should be the establishment of a task force to advise on the "Role of the U.S. Federal Government in International Standardization Activities." That task force was created in January 1979; its report was accepted without change by the ASTM Committee in June 1979, and has been published in ASTM Standardization News (April 1980 at p. 16).

The papers* presented at the Department of Commerce's public conference in October 1980, and the discussions reported in the following proceedings, all reflect on the indications, which the earlier reports cited above had been forecasting -- that of an imperative need to develop a formula for genuine and productive cooperation between the Federal Government and the private sector in addressing the nation's growing problems involved in international standardization and related activities, including product testing and certification. It is hoped that the proceedings of the conference will lay the groundwork for such cooperation by their reporting on candid discussions of various points of view, and by making recommendations for analysis and resolution of those problems. The proceedings should be regarded as a beginning, possibly as a catalyst, of information which needs to be developed and exchanged, and of actions which need to be taken in the greater public interest. It is hoped that all concerned, whether in the private sector or the government, in the world of standards or world trade generally will recognize the nation's needs in these areas and respond to them by statesman-like actions which will override purely personal or private concerns.


Howard I. Forman
Deputy Assistant Secretary
for Product Standards Policy

*DISCLAIMER

The Department of Commerce did not participate in any way in the preparation of the papers which appear in this publication. The Department of Commerce does not necessarily approve, recommend, or endorse any view or opinion expressed in these papers.

H.I.F.

Program

UNITED STATES DEPARTMENT OF COMMERCE

Conference

"International Standardization, Testing, Certification and Related
Matters, and Their Implications Under Trade Agreements Act of 1979"

Department Auditorium
14th Street, between Constitution
Avenue & E Streets, NW.
Washington, D.C.

October 15-16, 1980

Wednesday, October 15, 1980

9:00 - 9:10 Call to Order and Introductions by Dr. Howard I. Forman

9:10 - 9:30 Keynote Address by Dr. Jordan J. Baruch

9:30 - 9:45 Introductory Remarks by Moderator, Richard O. Simpson

9:45 - 10:15 "Comparative Analysis of International Standards Activities,"
by William A. McAdams

10:15 - 10:45 Discussion of Mr. McAdams' Paper

10:45 - 11:15 Coffee Break

11:15 - 11:45 "Major Problems in International Standardization," by
L. John Rankine

11:45 - 12:15 Discussion of Mr. Rankine's Paper

12:15 - 1:45 Lunch

1:45 - 2:15 "Proposed New Structure for U.S. Participation in Voluntary
International Standardization," by Dr. Leon Podolsky

2:15 - 2:45 Discussion of Dr. Podolsky's Paper

2:45 - 3:15 "Optional Mechanisms for Dealing With International Standardization
Requirements of U.S.A.," by Dr. F. L. LaQue

3:15 - 3:45 Discussion of Dr. LaQue's Paper

3:45 - 4:15 Coffee Break

4:15 - 4:45 "International Involvement of U.S. Standards," by Dr. W. E. Cooper
(with the assistance of Melvin R. Green)

4:45 - 5:15 Discussion of Dr. Cooper's Paper

Thursday, October 16, 1980

- 9:00 - 9:30 "Standards, the U.S. Economy and Government-Industry Cooperation,"
by Alexander B. Trowbridge (with the assistance of Gerald T.
Underwood and Lawrence H. Hodges)
- 9:30 - 10:00 Discussion of Mr. Trowbridge's Paper
- 10:00 - 10:45 "Establishment and Problems of U.S. Department of Agriculture's
Technical Office Under Title IV of Trade Agreements Act of 1979," by
Dr. Thomas B. O'Connell
- "Voluntary Standards and Federal Regulations: Problems and
Promise," by Henry E. Thomas and William F. Randolph
- 10:45 - 11:15 Discussion of Dr. O'Connell's and the Thomas-Randolph Papers
- 11:15 - 11:45 Coffee Break
- 11:45 - 12:15 "Product Certification and its Potential Impact Upon
International Trade," by Robert W. Peach (and
Allen M. Wilson)
- 12:15 - 12:45 Discussion of the Peach-Wilson Paper
- 12:45 - 2:15 Lunch
- 2:15 - 3:15 Free and Open Discussion of Papers and Proceeding Dialogues
- 3:15 - 3:45 Proposals for Future Work, Studies, Other Actions: Recommendations
and Discussion
- 3:45 - 4:15 Wrap-Up by Moderator
- 4:15 Adjournment

Program Participants
(in order of appearance)

Dr. Howard I. Forman is Deputy Assistant Secretary of Commerce for Product Standards Policy, Director of the Office of Product Standards Policy, and Chairman of the Interagency Committee on Standards Policy. He previously served as patent, trademark and international corporate counsel for Rohm and Haas Company for 20 years before entering into his present position.

Dr. Jordan J. Baruch is Assistant Secretary of Commerce for Productivity, Technology and Innovation. He previously served as a Professor of Engineering and of Business Administration at Dartmouth College, and was a lecturer of business administration at the Harvard Graduate School of Business Administration. A Registered Professional Engineer, with his basic training in electrical engineering, he has had many years of experience in the scientific community, both in the private sector and the government, and has been elected a Fellow of several learned scientific societies.

Richard O. Simpson is President and Chief Executive Officer of LITEK International, Inc. From 1969 to 1976 he served as Chairman of the U.S. Consumer Product Safety Commission. Just prior to that period he served for three and one half years in the U.S. Department of Commerce as Deputy Assistant Secretary for Product Standards. Prior to his government service he was Group Vice President of the Rucker Company. In 1976-78 he served as Chairman of the National Standards Policy Advisory Committee.

William A. McAdams is President, International Electrotechnical Commission. He recently retired as Manager, Industry Standards, General Electric Company. A research and engineering physicist before becoming primarily involved with standards, he has served on senior standards boards and councils of the Electronic Industries Association, the Institute of Electronics and Electrical Engineers, Association of Home Appliance Manufacturers, National Electrical Manufacturers Association, American National Standards Institute, and the American National Metric Council. He is also a past President of the American Society for Testing and Materials and a past Chairman of the Board of the National Fire Protection Association.

L. John Rankine is Director of Standards and Data Security, IBM Corporation. He is Chairman of the ISO Committee (TC 97) on Computers and Data Processing, and is a Vice-President of the American National Standards Institute (ANSI). He served on the ISO Long-Range Planning Committee and has been Chairman of ANSI's International Standards Council. He led the ANSI delegation to the ISO Plenary in 1979 and has participated actively in the Pacific Area Standards Congress. He was awarded the Astin-Polk Medal, in 1980, for promoting trade and understanding in the field of international standards.

Dr. Leon Podolsky is the immediate past President of the U.S. National Committee of the International Electrotechnical Commission, and Vice President of the IEC itself. A Registered Professional Engineer, he is a member of the International Standards and Certification Policy Committee of the Electronic Industries Association, Vice Chairman of the American National Standards Institute (ANSI) International Standards Council, and is a member of ANSI's Board of Directors.

Dr. F. L. LaQue retired in 1969 as Vice President and Assistant to the President of INCO, Inc. He has served as President of the American Society for Testing and Materials (ASTM), of the American National Standards Institute (ANSI), and of the International Organization for Standardization (ISO). He is a former Director of the Office of Product Standards, U.S. Department of Commerce, and still serves as a consultant to that office. In 1963-65 he chaired the Commerce Technical Advisory Board Panel on Engineering and Commodity Standards.

Dr. W. E. Cooper is a Consulting Engineer with Teledyne Engineering Services, and Vice President for Codes and Standards of The American Society of Mechanical Engineers (ASME). He has served on the: American National Standards Institute's Nuclear Standards Management Board; International Standards Organization (ISO) International Subcommittee on Nuclear Power; and the ASME Boiler and Pressure Vessel Committee. He has also served as Chairman of the ASME Subcommittee on Nuclear Accreditation.

Melvin R. Green is Managing Director, Codes and Standards, of the American Society of Mechanical Engineers. He also serves on the American National Standards Institute (ANSI) International Standards Council. Previously, he served on the ANSI Executive Council, on the Board of Directors of the American National Metric Council, and as Chairman of the ANSI Special Committee on the Structure and Purpose of ANSI.

Alexander B. Trowbridge is President of the National Association of Manufacturers. He brings extensive service in industry, associations and government to his task. He served in the U.S. Department of Commerce from 1965 to 1968, the last two years as Secretary. After leaving Commerce he was president of both The Conference Board and the American Management Association. His private industry experience includes top posts with Allied Chemical Corporation and Esso Standard Oil Company.

G. T. Underwood is Manager, Engineering Resource Planning, Deere and Company. An industrial engineer, he was formerly engaged in manufacturing and marketing management in the electronics industry and in business and investment consulting. Since joining his present company in 1958 he has held principal engineering and management positions in Germany, Mexico and the U.S.; in 1977 became Director of Corporate Standards, and assumed his present position just recently. He is a member of the Society of Automotive Engineers, the International Standards Council of the American National Standards Institute, and Chairman of the Agricultural and Industrial Section of the American National Metric Council.

Lawrence H. Hodges is Vice President, Technical Affairs, J. I. Case Company.

A former professor of Agricultural Engineering at the University of Wisconsin, he is: a Vice President of the American National Standards Institute (ANSI); Chairman of the Technical Board, Society of Automotive Engineers; Chairman of the Engineering Policy Advisory Committee, Farm Industrial Equipment Institute. He is also a past President of the American Society of Agricultural Engineers.

Dr. Thomas R. O'Connell is a research entomologist who has served with the Agricultural Research Service of the U.S. Department of Agriculture in Iran, Morocco and Mexico. He has also had service as an Assistant Agricultural Attache, Foreign Agriculture Service, in Mexico City, and with the U.S. Mission to the European Economic Community in Brussels. Currently, he is a Group Leader in the Technical Office of the Department's Foreign Agriculture Service, in Washington.

Henry E. Thomas is Director, Standards and Regulations Division, United States Environmental Protection Agency. He is responsible for developing and issuing environmental regulations, and is actively involved in international and national harmonization of test methods. He previously served with the Executive Office of the President on inflation and economic problems. His earlier experience was in the private sector where he was active in financial and systems analysis matters for major corporations.

William F. Randolph is Deputy Associate Commissioner for Regulatory Affairs, Food and Drug Administration, Department of Health and Human Services. Previously, he served as Chief of Operations of a Class VI Agency, U.S. Army in Europe.

Robert W. Peach is Manager of the Sears, Roebuck and Company's Quality Control Division. He is a Registered Professional Engineer, a Fellow of the American Society of Quality Control (ASQC), and has served the Society as Vice-President of Publications and Chairman of its Standards Committee. He is a member of the American National Standards (ANSI) International Standards Council, the International Certification Committee and the ANSI Z-1 Committee on Quality Assurance. He chaired the committee which wrote the Z-1.15 Generic Guidelines for Quality Assurance, and serves on the U.S. Tag to the ISO 176 Quality Assurance Committee. He is the ANSI alternate delegate to ISO CERTICO, and is a member of the U.S. Delegation to the International Laboratory Accreditation Conferences (ILAC).

Allen M. Wilson currently is Secretary and Staff Director of the U.S. Electronic Components Certification Board, the 15-man management group in the U.S. for the International Electronic Components Quality Assessment (IECQ) System. He is on the Executive Staff of the Electronic Industries Association, and is Vice President of its Engineering Department and its Solid State Products Division.


IMPORTANT - ATTENDEES PLEASE NOTE

A principal object of this conference is to commence the development of a data base which can be used to identify the strengths and weaknesses of United States' participation in international standardization and related activities, and to help chart a course of action for improving that participation as an important step in carrying out the provisions of the Trade Agreements Act of 1979.

The persons who have prepared and will be presenting papers at this conference have made a significant initial contribution to the data base. More such contributions will be needed from the other participants in the conference, namely each of the attendees. In the public interest you are strongly urged to express your views concerning any of the papers or policy proposals discussed at the conference or recorded in the conference proceedings which will be published in a few months. There are several ways in which you can do this:

- (1) Write any questions or comments you care to make during the discussion periods provided throughout the program, on the cards distributed to you for that purpose. Then ask for the microphone, identify yourself, and read your question or comment clearly so that the person to whom it is addressed can understand your point and reply, if appropriate.
- (2) Following the conference you are encouraged to submit a detailed paper of your own on the subjects of the conference, or a critique of any of the papers and/or views which others have expressed during the proceedings. Such submittals, if received within 30 days following the conference, will be included in the published proceedings. If received after 30 days they may be published later in a companion volume of other papers that have been submitted, and for which there was not sufficient time available in the program to have them presented at this conference or to have them included in the initial volume of the conference proceedings.
- (3) Each attendee will be sent a copy of the proceedings of the conference. It is planned to include some tear-out sheets at the end of that publication. You are invited to use those sheets to make any comments or observations regarding anything in the publication, and return them to me for inclusion in the companion publication as part of the published record of the conference. (Optionally, if you wish to submit comments or observations, but prefer that they not be made a part of the public record, your request will be honored accordingly.)

Your communications should be sent to me, c/o U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230 (Room 3876).


Howard I. Forman
Deputy Assistant Secretary
for Product Standards Policy

PROCEEDINGS - PART I

of

CONFERENCE ON

October 15, 1980

(9:00 a.m.)

DR. FORMAN: It is my pleasure to welcome you here today, to the Conference of the Department of Commerce on International Standardization, Testing, Certification, and Related Matters and their Implications Under the Trade Agreements Act of 1979.

I have just two functions to perform this morning, mainly to introduce the speakers who share the platform with me at the moment and to make a few announcements.

The first announcement grieves me very much to make and that is to notify those of you who do not know of the passing of Bill Andrus who most of you I am sure know spent 15 or 20 years in international standards work on behalf of the government when he was at NBS and more recently as Vice President for Standards of NEMA, the National Electrical Manufacturers Association.

I think it would be very appropriate if all of us would take a moment -- please rise in his memory.

(A standing, silent tribute is made to Mr. Andrus.)

Thank you very much.

During the coffee breaks, lunch and so forth, some of you may be in touch with your offices or others, and you may wish to have calls come back to you. There will be a message board in the south corridor, right outside this door. And there is a direct line which, if you'd like to make a note, is 377-3346. For out-of-towners, that's area code 202-377-3346. As I say, the message board will be right outside that door.

Here's an important item. Restrooms for ladies and gentlemen will be found in two corridors. One is over that way to the north and the other one is over that way, to the south. And there are two sets of them at the 14th Street side and at the 15th Street side.

There are also public telephones available. If you go back to the 14th Street entrance you'll find one to the left of the main entrance and one to the right, and the same applies back here in the 15th Street corridor.

You're reminded to hold on to your invitations that brought you in here because you'll need them to get back in if you leave the premises during the lunch hour or coffee break, and when you come back tomorrow.

Speaking of coffee breaks, coffee, tea and milk will be served in both corridors. That's on the house. If you choose to use the Department's lunch room, when you walk out to the entrance you came in, on 14th Street,

there is a staircase that takes you down one flight, marked National Aquarium. You're not supposed to eat the fish-- you go to the cafeteria.

If any of you wish to leave and are not familiar with the area and want to find a restaurant close by, you go in that direction, up 14th or 15th. There is the Hotel Washington and there are some other restaurants in that area.

Let me remind you that the proceedings will be mailed in a couple of months. You have that notice in the inside cover of your program. It will be sent to those who have registered. If you failed to register when you came in, please do so before you leave. And, lastly, I want to point out that during the question and answer period, instead of you coming up to the microphones standing on the pedestals, Mr. MacKay will be at one side and I will be at the other. We'll bring the mikes to you. Either up or down, wherever you might be.

We will not give the mikes to you on your request. That will be up to the Moderator, Mr. Simpson. He'll identify the person that he wishes to call upon and we will hand the mike to that person.

Those are all the announcements I have to make and now I have the great privilege of introducing, first, Dr. Jordan J. Baruch, our Assistant Secretary for Productivity, Technology, and Innovation, who will deliver our keynote address to set us off right for this conference.

KEYNOTE ADDRESS

Presented by: DR. JORDAN J. BARUCH

First, I want to thank you all for coming. Howard and I, Jack, and others, get paid for being here today and I know you don't. So you're obviously here out of a sense of commitment to what you see as a common task.

The United States, for the 200-odd years of its history, has relied on the competitive forces among the firms that constitute its private sector to increase its capabilities, to develop its products, develop its processes, satisfy the needs of its public, and develop one of the strongest and richest countries in the world.

But the old order changeth. We import enormous amounts of our energy supply; we import raw materials from chromium to titanium, materials that other nations have learned to price in a way that has put us at a growing economic disadvantage.

Other nations, like Japan and Germany, who have always imported large amounts of their raw materials, have long been forced to export in order to

create the foreign currency necessary to pay for those imports.

Because of this changing character of world economics, another more subtle change is taking place. I've now met with ministers of trade or my counterparts from about sixty countries in the world from Australia to Zimbabwe and find that they no longer view the firm as the economic unit of activity.

Much of the world sees the nation-industry as its economic unit. Various countries have learned to cooperate -- government and industry -- in investments, in the development of new technology, in a wide range of activities from direct subsidies to incentives for decisionmakers in a way that has aggregated their industrial strength so that America today faces a new type of competition. A competition not from individual firms, competing with individual firms, but from nations competing in the economic sphere.

At the same time international trade has become more important to us. We, too, must create the necessary wealth in order to purchase the things we need from abroad and we must be able to compete with foreign suppliers, domestically, in order to insure our domestic economic well-being.

Critical to the area of international trade is the whole process that we call international standards. You know, we often think of international standards, when we think of them at all, only in terms of developed nations.

It's not true. The importance of international standards is recognized throughout the world. I just returned from Africa. Talking to the people in Senegal and in Kenya, it became clear that they too were concerned with international standards, standards for advanced technology such as computers. The Senegalese, for example, are endeavoring to develop an international standard for dehydrated maize and bean flour. An international standard critical to the health of the people in Africa because without such a standard the balance of amino acids in the protein content of that flour would be undefined and we would find people getting licene deficiency as we did in the early years of this country.

So international standards and their sound development are critical throughout the world to both developed and developing nations. Because of the new economic era in which we find ourselves, the setting of such international standards must be a joint private sector-government concern. It's clearly a private concern because of their need to guard private economic interests that are often properly narrow.

It's a government concern because the government has a responsibility to guard the interests of an otherwise unrepresented public. It must, therefore,

be our joint responsibility and our joint determination, that the United States representation in the process of setting international standards shall be the best possible representation we can put together.

Currently, participation in international standards setting activities is largely done by individuals who are self-selected based on interest, the availability of time, the wherewithal to travel, and the support of their employers.

Such a self-selection mechanism may, of course, yield the best national representation, but that's both doubtful and undemonstrable. It is up to us, here, to take a note from Germany, Japan, Australia, France, and others to develop a form of cooperation between the private and public sector that will insure the best participation in the international standards setting activity.

The President and Congress have given Commerce the mandate to serve as the U.S. government focus for such cooperation. If we operated true to the form of many other government agencies, we would sit down in our -- I won't say Ivory Tower -- our gray tower -- and write a mandate for cooperation or write a set of rules. But that doesn't work. That isn't cooperation. That's dictation.

A cooperative relationship cannot be established by one side. That's why you're here today. We need you; you need us. We have to learn to live together.

The outcome of this Conference should be a jointly developed, cooperative *modus operandi*. I want, out of this Conference, a program that insures the joint participation of government and industry to identify, secure, fund, and empower those representatives that will best represent our joint interests.

It is unlikely that that system now exists. Your job is to work with us to create one that does that task. I wish you well in your effort and thank you for your participation.

DR. FORMAN: Thank you, Dr. Baruch. You really have set an excellent goal and tone for this conference.

When it came time to think in terms of selecting a Moderator, I can tell you that only one person came to my mind, and one person only. That was Dick Simpson. Everyone I mentioned this to agreed with me because we thought he had all the experience, the respect of all of you, and I don't know if he has to be impartial but he even is that, too.

He just seemed like the ideal person and thankfully he was able to

take time out from his private sector business ventures -- now that he's in the private sector -- and come back here from the west coast to give us his time for these two days.

From here on this program is in Mr. Simpson's hands entirely. I'm going to retire and operate one of those mikes under his direction.

Dick? We welcome you. Please come up and take charge.

(Applause.)

MODERATOR SIMPSON: Thank you, Howard. Good morning, ladies and gentlemen.

When Howard called me a couple of months ago, perhaps two or three months ago, he said they were planning a conference, generally described it, and asked if I'd be willing to come to Washington and preside at the conference. He didn't discuss the role of moderator like he did just now. He asked if I'd be willing to preside.

I didn't know what preside meant. However, it sounded like something a judge would probably do and since one of my duties at the CPSC was judiciary I knew about presiding and I said: Sure, I could handle the task.

About a month after that initial discussion we had another phone conversation discussing the conference and he said he was glad that I was willing to be chairman of the conference. It was a little bit of a switch, I thought, but being a chairman is something like being a presiding officer and I thought, well, it's a slight change and maybe I'm still qualified.

Then the program announcement came out in the Federal Register and I was listed as the moderator and I wasn't sure what a moderator did. I thought it was something that Bill Moyers did with the League of Women Voters in "limited" debates.

I thought I'd better do some research and I went to the dictionary which says: A moderator is one who moderates. Which was not terribly helpful. So I looked a little further and found a definition that describes a successful moderator as one who is: Opposed to radical or extreme views or measures; particularly in politics.

I figured that that's probably what Howard had in mind. He knew I was kind of a moderate person, politically and otherwise, and I knew I was on safe ground because we all know that the standards business is a technical business and politics never enter into the world of standards.

(General laughter.)

Don't we all know that? Well, I thought I was on safe ground. It had also been my experience in the previous decade, the last ten years, that you don't have to know anything about standards to discuss standards policy.

In fact sometimes it's an encumbrance. In fact, I've been in several meetings which discussed at the highest government levels, both international and domestic, the subject of standards policy without knowing anything about standards per se. In fact I had found that in many cases people who discuss standards policy had never even seen a standard, let alone participated in its development.

With that in mind and to make sure that this audience has the opportunity to see at least one standard, I decided to bring one with me. And I'm going to show it to you. The standard in question is a standard that a group of us have been working on for some time. It's not yet a national standard but our group hopes it will be soon.

It's scheduled for a final vote to see if it achieves national consensus status in the near future. The standard in question is a standard bearer. In fact, it's the Republican standard bearer.

(General chuckles as poster of Ronald Reagan is displayed.)

Our national consensus vote is scheduled for November 4. I want all of you to go out and vote for the standard of your choice on that day. And I know the Department of Commerce would be pleased if I leave this poster up here but since I can't get my thumbtacks in I'm probably going to have to take it down.

(General chuckles.)

You see, we all know that standards and politics don't mix.

My personal involvement in standardization policy matters started in late 1969 when I joined this Department in the position that Howard Forman now occupies as the Deputy Assistant Secretary for Product Standards. Six weeks after I joined the Department, I found myself as the head of a U.S. delegation to a meeting in Geneva, of the Economic Commission for Europe.

The meeting was entitled: A meeting of government officials responsible for standardization policy. And, although I pride myself on being a quick learner, six weeks hardly qualified me to represent the United States at that meeting. Nevertheless, there I was.

I concluded that our foreign partners were much more skillful than we, and knew a lot more about the subject. We survived the meeting without giving the country away and I came back to the United States and said: I'm going to seek

out the international standards experts in government, so I can learn from them.

Much to my amazement I found that, practically speaking, there aren't any international standards experts in government. And I can tell you how concerned I was when I realized that I really was the expert.

I then looked to the private sector concluding that surely I would find hundreds or tens of thousands of international standards experts in the private sector.

My search there was a little bit more fruitful than the government search but it wasn't altogether encouraging. In fact, I remember remarking that I doubted if there were a hundred people in the United States at that time, roughly ten years ago, who could truly qualify as international standards experts and frankly I'm not sure that there are a hundred today. There may be. I hope everyone proves me wrong.

In order to accelerate my standards learning process -- because here I was in the position of the expert and knew I'd have to go off to more meetings -- I turned to my assistant. Everybody in government has assistants. And I said: I'm going to learn by reading. So would you please bring me the latest copy of the United States National Standards Policy and the National Certification Policy and the international counterparts of those policies. And while you are at it, bring me a copy of the latest and most comprehensive study which shows the economic implications of domestic and international standardization.

Guess what I received. Nothing.

In fact, it's probably the only time anybody ever asked someone in government for a piece of paper and they found that none existed! Anyhow, since that time, and that's ten years ago, a lot of events have happened. There are a lot more experts. There are a lot more pieces of paper, I know that. And we have conferences like this to help us all learn and share.

The call for the conference said that a major purpose is to explore the major national policy issues and concerns regarding actions by both government and the private sector in international standardization. When the program uses the term international standardization, certification is included under that umbrella.

It's also hoped that the conference will focus on the effect of such activities, internationally, on this country's trade. The government, I understand, wishes explicitly to have the conference focus on the problems and concerns associated with its implementation of Title IV of the Trade Agreements Act of 1979. Title IV is the GATT standards code.

During the conference I am sure that we will have the opportunity to compare how the U.S. goes about its international and domestic standards activities compared to some of our major trading partners. Maybe we can learn from them. I am sure that we will discuss in the next two days several proposals for improving U.S. standards participation or conversely, we may agree that what we are doing now is okay. At least we will explore the issue.

Certification arrangements, regional and international, will be discussed because they are important and they are covered by the GATT standards code.

Although the conference is directed toward international standardization, I am sure we will find during the course of the next two days that we will, in attempting to discuss and analyze international standardization, come back, time and time again, to domestic standardization.

Some people believe you cannot separate those; others believe you must separate those. I'm sure we'll have a lot of room for discussion on that subject.

You'll notice on your program, the blue document that you received on your way in, tomorrow afternoon there's a session at 3:15 titled: Proposals for Future Work Studies and Other Actions. I'm going to ask for your help in anticipation of that section and hope that when, during the conference, you have a recommendation that is either implicit or explicit in the dialogue, that you use the 3 by 5 cards -- does everybody have those 3 by 5 cards? Yes.

Would you please give a copy of the card, if you have a recommendation for future work, to either me or Jack Williams, say by noon tomorrow.

Could Jack identify himself? Is Jack here? Ah, he's way in the back. He's the handsome young man back there. He'll either be up there or down here. If you'd give those cards to me or Jack it would be very helpful and I would appreciate it.

Before I call on the first speaker I'd like to tell you one of my favorite stories which may be appropriate for this conference. The story is about a man who found himself at what looked like the gates to heaven. And there were the pearly gates in all of their magnificence with a table in front of the gates. On top of the table was a very large book. Seated behind the table was an angel.

The man walked up to the angel and said: Is this heaven? The angel said: Yes, it is. He said: I'd like to enter. The angel said: There is only one requirement for entry into heaven and that is that you must be listed in our book of ages. And the angel said: If you give me your name and your occupation

and your country of birth I'll see if you're listed.

The other man said: My name is Dick Simpson and I'm an engineer from the United States of America. The angel looked through the good book and said: I'm sorry, sir, you can't enter heaven because you're not listed in our book of ages.

He said: Wait a minute. There must be some mistake. Look again. Richard O. Simpson, engineer and businessman. United States of America, born in Missouri and lived in California most of his life. The angel looked again. Simpson. Simpson, R. A lot of Simpsons. A lot of Simpson, F's. No Richard O. Simpson to fit that description. He said: I'm sorry sir you can't enter the pearly gates.

Well, this person lost his moderate tone about that time and began banging on the table and said: Look, there's got to be a mistake. Richard O. Simpson, businessman, engineer, ex-government official of the United States and I spent over ten years trying to encourage cooperation between the private sector and government in standards matters.

The angel smiled and said: Why didn't you say so at the outset? And he turned to his assistant and said: Bring the book of martyrs.

(General laughter.)

I want you to remember that story as we go through the conference these next two days.

I am not going to go through the speakers bios. They are in the program. They are brief. They really don't do justice to the individuals because they are in fact the standards experts and I'm simply going to ask the first one, Bill McAdams to come up. Bill?

As he comes up I want to tell you that one of the reasons that I didn't sell the country out in that first Geneva meeting was because I had a good group of private sector advisors and Bill was one of those.

Bill, a belated thank you.

COMPARATIVE ANALYSIS OF INTERNATIONAL STANDARDS ACTIVITIES
Presentation by: WILLIAM A. McADAMS

MR. McADAMS: Thank you, Dick.

I was very interested to hear Dr. Baruch's keynote speech this morning because many of the things he said I am going to elaborate on to some extent.

I also appreciated hearing Dick Simpson's many comments about standardization and his activities with the government. I have had the pleasure of dealing with Dick in many of those activities over a period of years and I must say it's been a great pleasure for me.

I have entitled my speech, a "Comparative Analysis of International Standards Activities".

The United States has really been involved in international standards work for well over a century. More than a hundred years ago many of the newly formed professional societies began to form standardization bodies. At that time each professional society was composed of all of the experts in a particular field. Those experts came from government, industry, academia and so on. Their main goals were to establish better understanding of new scientific discoveries and to develop safe and practical methods of applying them.

I emphasize safe because that is one of the first things that the standards-makers considered. The other most important thing they did was to form the basic means of communication.

Standards, as you see, became one of the basic tools for accomplishing the goals of the professional societies and in at least some of the major fields, the standards development actually started at the international level earlier or at the same time as at the national level.

International trade has always been one of the incentives for international standards but the incentive has been much greater for our trading partners than us and, as Dr. Baruch said this morning, this is because their exports are much higher in relation to their gross national product than is the case in the United States.

For example, for most of our leading trading partners exports average 15 to 25 percent of the gross national product while ours still is only about 6 to 7 percent. This is one of the main reasons why foreign governments and their national standards bodies work so closely together.

International standards are obviously now becoming more important in international trade. The GATT code on technical barriers to trade, I think, is probably the best indication of this. Taking the code into account, along with the many trade deficits we've had in recent years, it is certainly time for a review of U.S. participation in both the development and the application of international standards.

You can consider this analysis to be a part of such a review. Now, before starting this analysis, I would like to state some of the basic ground rules under which I have operated:

First of all, the purpose of this paper is to examine and compare the international standards systems of the United States with those of its principal trading partners. For the most part the paper will describe only the international organizational structures of the national standards bodies and their relationships with the national governments. But I have not had time to prepare a close examination of the practices and procedures that are used for participation in international standards activities.

It has also not been possible to appraise the extent of the need for participation in international standards bodies other than those of ISO and IEC. I should point out that there are now dozens of other international standards bodies doing work in various fields that I suspect many of you do not realize is even in progress.

A more comprehensive comparison of the U.S. and foreign procedures for participation in ISO and IEC may be necessary at some later date. The same is true for the handling of relationships with the many other international organizations involved in the development and use of standards. In the meantime we need to determine the serious weaknesses in the present U.S. system.

In developing improvements we may need this extra information to assure that any new system we create will be workable, or at least as workable as the one we have now, and also provide the benefits that we hope to achieve.

As most of you know, the leadership of the U.S. system for participation in international standards work has been assumed by the American National Standards Institute. ANSI has assumed this role under a constitution approved by its members and its members, as I am sure you realize, are mostly private companies and associations.

ANSI has been the U.S. member body of ISO since ISO was organized in 1947. The U.S. National Committee of IEC, which is now a special committee of ANSI and has been since 1977, became a member of IEC when IEC was created in 1906.

ANSI has never been formally recognized, in any way, by the federal government, but many representatives of branches of the government are active in ANSI's international standards work. The federal government also has never provided any regular financial support for ANSI, although it does make grants for various programs that it feels are in the public need or in which it has some special interest of its own.

The ANSI board has established, within its organization, an international standards council that is responsible for ANSI's administrative policies in international standards bodies. Along with that ANSI also has an executive standards council which is responsible for the management of ANSI's national standards work. In addition the executive standards council is responsible for

U.S. participation in the technical work of ISO. I emphasize ISO here because it does not also cover IEC.

The executive standards council has a number of standards management boards to assist it and most of the participation in international work of ISO is handled through those management boards, or through ANSI member organizations.

ANSI through one of the sections of its bylaws has delegated all responsibility for participation in IEC operations to the U.S. National Committee of IEC. But it requires the U.S. National Committee to coordinate its policy decisions with the international standards council and its technical matters with the executive standards council.

ANSI doesn't really have well-defined procedures or organizational processes for review of the broad ISO programs and policy proposals. The international standards council is charged with this responsibility but often does not have documents in time for an adequate review by ANSI members who are affected by these policies and proposals and in some cases even the international standards council members themselves do not have the information in time. However ANSI does have a consumer council and a certification committee that are able to give competent advice on ISO policies and programs in these areas.

Policy positions are somewhat better developed for IEC, because the U.S. National Committee for IEC has an executive committee which holds frequent meetings that are open to all the U.S. National Committee members. These members are able to take part in discussions of all policy matters as well as technical committee problems in which they themselves are directly involved.

As I stated earlier, ANSI has no formal recognition by the federal government for any of this work. However joint discussions between ANSI and some branches of the government, especially during the last several years, have resulted in several cooperative arrangements for the development and use of ANSI approved standards.

ANSI has also established liaison with a number of other government agencies. The ANSI bylaws provide for a standing Board Committee on Government Liaison and Support to assist in these programs and also to develop mechanisms for improving the ANSI relationships with the U.S. government at all levels.

Many of the ANSI operations may soon be affected greatly by one or all of three national documents that have been issued since early 1978. And I am sure you are familiar with all of these:

First, the national policy on standards; second, the OMB circular A-119 on federal participation in the development and use of voluntary standards and, third, the GATT code on technical barriers to trade and, along with it,

Title IV of the Trade Agreements Act of 1979 which is an application of this code.

As we review the U.S. standards system for international work we should keep these documents in mind. Many provisions of these documents are similar to those policies in use by many of our trading partners.

Now, I'd like to explain how I have selected the trading partners for comparison. For this brief analysis it seemed practical to select only a few of our trading partners for comparison and the two best examples are obviously Canada and West Germany. They will be analyzed carefully since they illustrate some of the major differences from the U.S. and most other systems. Several other examples will be discussed later, but a bit more briefly.

I will start with Canada since it is close by and since I have personally been following the Canadian system from the very beginning. The Standards Council of Canada was established by an act of Parliament in 1970. It was given the responsibility to coordinate both national and international standards activities. It is a government-private corporation, funded by Parliamentary appropriations through the Ministry of Industry, Trade and Commerce.

You should note that the Council has 57 members: Only six from the federal government plus ten from the governments of the provinces. The other members are a reasonable cross-section of the private interests. I think it is important here to note that the government does not really have a majority in any sense of the word in this Council operation.

I would like to turn to the organizational structure of the Standards Council, and here I have covered only those parts that affect the international work. The Act gives the Standards Council of Canada the authority to represent Canada in ISO and IEC and other "similar" bodies.

The Canadian national committee of IEC has become an arm of the SCC and represents it in IEC. The Standards Council has formed a similar national committee for ISO. These two national committees direct the Canadian participation in ISO and IEC. The committee work is handled by advisory committees, much like those we have in the United States for both ISO and IEC.

In 1977 the national committees of ISO and IEC recommended to the Standards Council of Canada that it establish an advisory committee on international standards.

This advisory committee deals with questions that are common to both ISO and IEC, something we certainly need to handle better in the United States, and is a forum for discussion of the international standards problems which are of special interest and concern to the Standards Council of Canada itself.

The advisory committee on international standards is composed of the executive committees of the Canadian national committees for ISO and IEC. There is one other feature of the Standards Council of Canada which I think is a very important one in this comparative analysis. The Council responsibility extends into the federal government. As a result, the Canadian government's specification board is now one of the "accredited standards writing organizations" of the Standards Council of Canada.

Its standards are recognized as national standards of Canada in the same way that standards from private bodies are recognized. The standards of the Canadian government's specification boards are comparable to those of the U.S. General Services Administration.

This arrangement, therefore, assures a much closer tie between the government and the private sector than we have here in the United States. There is no question that the formation and operation of the Standards Council of Canada has greatly improved Canadian participation in ISO and IEC. Of course, part of the reason for this is that the government of Canada provides 100 per-cent funding for this participation.

Now let's look at the German System.

In 1975 the federal government of Germany signed a contract with a German standards institution called DIN, which is simply an acronym for the German words for the institute. The contract has become the envy of many other national standards bodies and a new approach to government relationships with the private standards bodies for the development and use of standards.

I'd like to review the main provisions for this contract. Under this contract, and I'm citing only the main features of the contract, the federal government agrees to recognize DIN as the competent standards organization for West Germany. Note it is "the" competent. It does not suggest that there is more than one competent organization.

It recognizes DIN as the national standards body in non-government international standards organization. I should note that the Association of German Electrical Engineers (VDE) formed and has long sponsored the German national committee of IEC. But five years prior to this German contract with DIN, the VDE signed a separate agreement with DIN and has since had a working partnership with DIN.

VDE continues to operate the German national committee under this present contract with the federal government.

Now, the federal government also gives DIN the opportunity to develop standards on a priority schedule on subjects which the government believes are needed for the public good.

It also agrees to apply DIN standards in government operations wherever it is practical to do so. It further agrees to provide financial support within the available resources of the federal budget and it does this by grants and other arrangements.

I should point out here as another note that the present federal support is about 15 percent of the total DIN budget. And since DIN is a very large organization, totaling about 800 staff, this could be equal to or greater than the total ANSI budget. In other words, the 15 percent which the federal government of Germany provides for DIN is more than the total budget of ANSI.

Now, in return for these commitments, DIN agrees to operate with procedures that consider the views of all interested parties; to guarantee that the published procedures will be followed by its member organizations; to insure that its standards are suitable for reference in government documents; to give preferential treatment to government requests for standards; to withhold publication of DIN standards that are in disagreement with any regulation being developed or issued by the government; and to assist the government in its obligations under GATT or under international agreements in the field of standards.

I think you see here that the federal government of Germany, with its agreement to do certain things, and DIN, with its agreements to do certain things, have reached quite an unusual agreement.

It is obviously a very comprehensive contract and if you have not read that contract, I suggest that you get a copy and go through it. It is worth your time and effort to do so. It is certainly one of the best examples of government recognition of a private national standards body.

It has also been accomplished without formal legislation as has been done in Japan, France, and a number of other countries. There are contracts of other kinds of agreements in use by other of our trading partners, for example, in UK and the Scandinavian countries, but none of these cover the many obligations that the West German contract with DIN covers.

In comparing the German arrangement with the U.S. system, again I remind you to go back and look at the documents I mentioned earlier. The OMB circular, the Trade Agreements Act, and the proposed national standards policy all contain provisions that equal many of these DIN German government contract provisions.

Now, let's look at some of the other trading partners. Practically all of our leading U.S. trading partners have strong international standards programs that are carried out with a better government-private interface than we have in the United States.

Most of the governments have either approved legislation or taken

other actions that give special recognition to the national standards bodies. In many cases the government relationships with the standards bodies include at least some of the features of the Canadian and West German systems.

It is worth looking at some of these just to see the similarities. I have picked UK, France, Sweden, and Japan for further comparisons, but on a much briefer basis than I did for West Germany and Canada.

Let's take a look at the British situation. The British Standards Institute is the body that manages international standards work.

It is a corporation operating under a royal charter granted in 1929. It has remained independent and in 1942 it was officially recognized by the government as the "sole organization" for issuing standards having national application.

The charter and official government recognition have been interpreted to cover international as well as national standardization work. BSI is governed by an executive board of 27 members including just three from branches of government. BSI has been one of the most influential organizations in both ISO and IEC ever since those organizations were founded.

The British national committee of IEC operates through the BSI electro-technical division. The government provides about 25 percent of the income for BSI by matching funds from non-government sources.

The government relies heavily on the voluntary compliance with BSI approved standards, including international standards that BSI has identified as being acceptable. In comparison to the United States there are actually very few UK standards laid down by law.

Next, let's go to France. Most of the French standards system operates under the French Association for Standardization, better known as AFNOR. AFNOR was recognized by a statute issued by decree in World War II, in 1941. It has a status of a private body under that statute and in 1943 another decree declared AFNOR to be in the "public interest."

The 1941 decree also reaffirmed the government Commission on Standardization which had been in place for some years, and at the same time it provided for other independent private organizations called Standardization Bureaus that were put in place to develop standards in specific fields.

Nevertheless these standards have to be approved by AFNOR in order to become national standards. The Commissioner on Standards gives official status to the standards, verifies compliance with them, and sees that there is proper participation in international standards work.

AFNOR is the French body of ISO and uses the standardization Bureaus for programs in their areas of competence. The French committee of IEC is not a part of AFNOR, it is a part of the Technical Union of Electricity, UTE, which is a separate body entirely from AFNOR.

The French government provides 50 percent of the AFNOR income by means of what appears to be a sort of industry tax. The UTE receives 50 percent of its income from Electricite de France, which is the public utility of France, and 10 percent from the public tele-communication companies plus 40 percent from private industry.

The French accept many international standards just as the British do and especially those from IEC. In fact, the French make a practice of including a preface to their national standards indicating the differences of the National Standard from the IEC standard and the basic reasons for those differences.

In Sweden the Swedish Standards Institute is the organization which governs the international standards work. It is a not-for-profit organization incorporated by public law. It received a charter ratified by the King in 1958. It is the official member body of ISO and recognized by the government as such.

The Swedish Electro-Technical Commission, SEK, acts as the Swedish national committee of IEC. It has its own constitution but it is affiliated with SIS as its electro-technical division. The Swedish government provides about 30 percent of the Swedish Standards Institute income.

The SEK obtains most of its income from sales of publications and contributions from private industry. The government pays SEK an amount equal to 60 percent of the private contributions.

Like France and Britain, Sweden uses many international standards including a high percentage of those of IEC.

I might report that other Scandinavian countries operate about the way that Sweden does, but in the case of Denmark, as an example, Denmark just automatically takes the IEC standards and has them made into Danish standards by a new cover.

I have read lots of documents on the Japanese standards system including parts of the laws that have been passed but I still just can't comprehend exactly how that system operates. But here are some of the points that I think are of interest: The Japanese standards work is carried out under the industrial standardization law of 1945 and several later revisions to that law. The law provides for a Japanese industrial standards committee, JISC, which is the organization for developing Japanese industrial standards.

JISC was designated as the representative of Japan in ISO and IEC by decisions of the cabinet council in 1952 and 1953, respectively. Practically all expenses for the participation in ISO and IEC are paid to JISC by the government, but I think you should understand that the Japanese work in standards, both nationally and internationally, is primarily a matter of trade and development of trade, particularly exports.

Now, I would like to go on to another problem which I cannot overlook in making a comparison between the United States and our trading partners. And that is a special problem we have with our European partners.

Almost all of our western European trading partners are deeply involved in regional standardization activities that the United States certainly must take into account. These are the activities of the European Committee on Standards and the European Committee on Electrical Standards, better known as CEN and CENELEC.

I am sure that many of you here cringe when I even mention CEN and CENELEC because they have given us some considerable trouble in ISO and IEC, since so many countries are represented in those two organizations and so many of their documents come into ISC and IEC for consideration.

There is also the European Commission for Conformance Certification of Electrical Equipment, CEE, which has greatly affected the electrical work in Western Europe.

The other organization, of course, is the Common Market which gets inputs from all of the three others. We should keep in mind that nearly all the Western European countries are participating in the standards work of these organizations and the amount of that work is just tremendous.

The representatives in CEN are somewhat like those you find in ISO. The representation in CENELEC and CEE are the national electro-technical committees, the same bodies that participate in IEC.

Many of the documents produced by these three bodies are being sent to the Common Market for consideration as Common Market directives. And there are more than 100 of these directives for standards, already, and at least 150 more under development.

The Common Market representatives all come from government so then there has to be a close liaison between the government people involved in

each country and the national standards group doing the work in CEN, CENELEC, and CEE.

All of this means that our trading partners in Western Europe have an added incentive for international standards work and that incentive is the unification of Western European standards. They consider this their highest priority and they have put in place a highly competent, well-supported system to bring this about.

Ladies and gentlemen, this concludes my presentation. I consider this merely a limited comparative analysis that does not begin to deal with all of the matters that we need to look at in making a detailed comparison of the U.S. system with those of its trading partners. But I believe that this is a reasonable start on the whole problem and I hope it has been useful to you.

Thank you very much.

(Applause.)

MODERATOR SIMPSON: Just a note, the speakers can either remain at the podium or come over to the table, wherever you feel most comfortable.

MR. MCADAMS: I would feel more comfortable at the table.

MODERATOR SIMPSON: The Moderator proposes to sit. Also as a note, I don't know if it is true in the rest of the auditorium but up here the temperature seems to go up and down. Please feel free to take off your jackets or coats and be comfortable, which I intend to do.

Let me, before we start the first question and answer session, re-emphasize how important these sessions are. The format we intend to follow is, if you have a question that you'd like to address to the speaker, hold up your hand and I'll recognize you.

Also, if you have a comment rather than a question or a suggestion for future work, you could do that at this time. It doesn't have to be a question. My personal observation, in talking with the government people who put this conference together is that they have no prejudgement of the outcome of the conference; that the report of the conference is not written; that they intend to take into account and seriously identify all suggestions that come out of the conference and that what they are looking for is candid, open, honest observations, questions and suggestions.

In other words, it's not a rigged deck. So the bottom line is that the conference is what you make it. And you're either going to make it on the record or during the Q & A. That is background.

Do we have anyone who has a question or a comment that they would like to address at this time? All the way in the back, in the middle. Yes, sir?

MR. BELFIT: My question is to our previous speaker, of course and --

DR. FORMAN: Excuse me. Would you identify yourself first?

MR. BELFIT: Oh, yes. I'm Bill Belfit and I'm with DOW Chemical Company. In reference to the funding of the various other international systems, for instance the DIN system in Germany or Japan, is the funding merely an administrative type of funding or does it cover the whole type of activity?

MR. McADAMS: There really aren't many strings attached to it at all. The German government works with the DIN organization to determine what it needs.

In some cases the funds are appropriated for specific projects but, on the other hand, if DIN feels that it needs to have some extra funds for particular programs which it feels are necessary it is usually able to get help.

There is another thing that the West German government and DIN have really developed into a nice working scheme. The federal government is now coming to DIN asking that it take on much of the work which our government in the United States would do in a regulatory way.

In fact, they have given so many requests to DIN that DIN is unable to keep abreast of everything that the federal government of Germany wants it to do, which isn't a bad situation to be in. It can, of course, work out priority schedules with the government and together they have a very reasonable mechanism for doing this.

MODEPATOR SIMPSON: Yes? In the middle and then down here. *

MR. BELANGER: I'm Brian Belanger from the National Bureau of Standards. My question is as follows, for Mr. McAdams: If you had unlimited authority and no financial constraints, what sort of government-industry organization would you establish in order to effectively manage U.S. participation in international standards.

In other words, what do you think it takes to really do the job right for this country?

MR. McADAMS: I don't believe it's my purpose to take a position on that, at this point. I want to wait until I hear the rest of this conference before I commit myself. I, of course, have a position of my own but I don't want to state that position at this time. I may later argue with some of the other speakers, or I may change my mind.

There is one thing that I didn't say at the beginning of this speech, which I should have said, and let me say it now: As you know I am President of the IEC. Anything that I have said here today does not in any way mean that I have consulted IEC OR that IEC has had anything to do with this presentation.

I hope you understand that I am not speaking on behalf of IEC. In fact, I haven't even discussed any of this material with the IEC.

MODERATOR SIMPSON: We have the next question down there, Howard. And while you're taking the mike down maybe I can ask if we can prevail on Bill to answer that question tomorrow afternoon in the session titled: Free and Open Discussion of Papers and Preceding Dialogues. After he's heard all the other speakers. If he'd be willing to; he doesn't have to.

MR. McADAMS: Yes, I think I'd be willing to do that.

MR. BREDEN: Les Breden from the Department of Housing and Urban Development.

Just roughly, what percentage of the total money that ANSI spends on international activities goes to IEC.

As you know, in the past there's been some effort to try to do away or blend in the IEC activities with ISO. I was just wondering what percentage are we talking about in monies in this stage?

MR. McADAMS: You mean, how much of the ANSI budget goes for international work and of that, how much of it to IEC, as compared to ISO?

MR. McADAMS: I think Don Peyton is in a better position to answer that question but I will say what I think and if Don wants to correct me, he can feel free to do so.

If I remember the figures correctly, we're spending about two-thirds of the ANSI budget on international standards work. And of that I would guess, oh, maybe two-thirds of that goes for ISO and one-third to IEC. Something of that sort.

Is that about right, Don?

MODERATOR SIMPSON: Can we ask Mr. Peyton to help on that answer?

MR. PEYTON: I appreciate your figures, Bill, but they are not quite correct. Roughly 25 percent of ANSI's total budget goes to international standards. What you're talking about is about 65 percent of our technical budget goes for international standards.

MR. McADAMS: As far as I am concerned, Don Peyton is the man who should be answering your question.

MR. PEYTON: Let me answer the question. As far as percentages are concerned, Bill is about right because the dues to ISO and IEC are somewhat comparable. I think ISO's are a little higher. I think they are a little bit higher. But as far as the rest of it's concerned, because of the mode operation, where IFC takes on more of the responsibility than the member bodies do, as conversely in ISO we have secretariats, he's about right.

It's about, I would say, two-thirds and one-third, Bill, of the international between ISO and IEC but that is largely because of the way the two organizations are structured and the way they operate.

MODERATOR SIMPSON: Mr. Peyton, what does 25 percent of your budget amount to in dollars: Just kind of scope it. Is that a million dollars or two million dollars?

MR. PEYTON: No, it isn't. I haven't got my budget with me, Dick. I can't remember exactly.

MR. McADAMS: Well, 25 percent would be about 1.5 million. Okay?

MODERATOR SIMPSON: That's a lot of bucks.

Other questions or comments? Yes? Behind you, Howard?

MR. TONINI: Darrel Tonini with the Scale Manufacturers Association.

Mr. McAdams would you comment on the impact of the governmental attitude with regard to antitrust upon these national and international standardization activities in organizations?

MR. McADAMS: I don't think I heard the middle of that question.

MR. TONINI: The impact of the governmental attitude toward antitrust with respect to those organizations that you've described to us.

MR. McADAMS: I thought that's what you said but I just wanted to make sure. I can't really answer that question. I should say that overseas there is less concern about antitrust problems than in the United States, as far as standardization is concerned.

On the other hand, we have never really explored the antitrust parts of standardization work to any great extent in the United States. I think we all recognize that we have to be somewhat wary about how we conduct the work because there is no question in some legal papers, if you have read them, that standardization can be considered to be restraint of trade under certain conditions. But I am not a lawyer and I don't like to get into a legal discussion because I just am not competent to do it.

MODERATOR SIMPSON: As your impartial Moderator, maybe I could just comment that I think the antitrust implications of standardization activities are overblown, that there is no antitrust implication per se of standardization but sometimes it is a concern. I think too often it is an overblown concern.

If you get together and fix prices, sure, you have real problems. But if you get together in an open manner and discuss standards, that is something that is perfectly acceptable.

Down in front? And then, Don, we have one all the way in the back.

MR. SHERR: Sava Sherr of IEEE.

Bill, you've addressed some of the basic differences between the U.S. and other countries which are structural in nature and which involve funding by the government but isn't there a much broader difference between the way we operate in this country and the way we operate in other countries, which really is an attitudinal problem?

It's been touched on by at least the last question that was raised, and that has to do with the nature of the relationship between the U.S. government, let's say, and the industrial sector as a whole.

For example, you find countries like Japan, countries like West Germany. There is a real cooperative enterprise that goes on in terms of the trading interests of the countries, between the industry and the government, whereas in this country you find that there is very much of an adversary relationship that develops and I think that this has a lot to do with what happens structurally.

I wonder if you can comment on that?

MR. MCADAMS: I think what you say is right. One of the things I thought I covered in my paper was the greater government-private cooperation in international standards work than you have in the United States and it's really more than just a cooperation. It's a joint effort on the part of government and the private sector to improve trade, to provide a climate under which they can operate to enhance their productivity, to compete abroad in any way they can do it, and to work together as a partnership.

I think practically all the countries that are our major trading partners have a partnership with their government and in cases where there is no formal action to recognize a standards body, I think in Norway, for example, there is no formal recognition of the standards body, but by tradition the government accepts it as useful to the country.

In the certification area, most of the major testing laboratories have each been recognized by the national government as a testing laboratory on behalf of the government. These are the kind of things that happen as a government-private relationship which is not antagonistic to the private sector but a cooperative effort.

Again it comes back to what Jordan Baruch said this morning and that is trade to most other countries is much more important in terms of gross national product or any other measure you want to use.

Percentage-wise it is much, much more important and the government realizes that and works with its industry to enhance trade. If you took Japan as an example, the Japanese law which sets up the Japanese Industrial Standards Committee is really a law to promote exports. And the standardization is applied, from a quality standpoint, to certain exports. I think there are about 100 export products now that are required to meet certain quality standards under that law.

It really started while MacArthur was in Japan. He tried to persuade the Japanese that their only method of surviving without conquest was to develop trade. He encouraged them to put high quality products in the world market and they simply passed laws to do that and part of their standards program is based on that whole plan.

MODERATOR SIMPSON: We have a question or comment in the back?

MR. HODGES: I'm Larry Hodges from the J.I. Case Company.

First, I'd like to commend Mr. McAdams for his excellent summary. I would like to caution the audience, however, when you look at the DIN system as what an apparently excellent model it is, you must keep in mind that in Germany everything is prohibited except that which is expressly permitted and they use standards and regulations to express what is permitted.

So far, in this country, we have operated on the principle-- though we are catching up fast -- that everything is permitted except that which is prohibited expressly by standards or by law.

So keep in mind those differences. Keep in mind that the Germans are a highly disciplined people and that they do have the points that have already

been stressed here -- that they do have a working relationship with their government which is not present in this country.

So as we try to build a U.S. model system, we may want to borrow from the Germans but we have to keep those other differences in mind.

MR. MCADAMS: I certainly agree with what has been said. I think it is a very, very important consideration. It's been exactly like Mr. Hodges has expressed. MODERATOR SIMPSON: We have a question down in front.

DR. LAQUE: I'm Frank LaQue, speaking for myself. I notice, Bill, on your chart covering Japan that there was no reference to MITI Ministry of International Trades and Industry. When I visited Japan in 1973, in a ceremonial way as President of ISO, I was in the hands of MITI who apparently is the father of the other organizations that you described.

I mention this only to further emphasize what you have already said: That Japan's concern is primarily with international trade and industry, rather than the national standards activities as such.

Now, with respect to the antitrust aspect, I recall that when we were working on that panel back in 1963, I went over to the Department of Justice and asked them if they would define procedures that would be designed to avoid any implications of antitrust activities in the development of standards.

They refused to do that. They reserved the right to decide for themselves of any instance, whether any activity has antitrust aspects. When that bill that you drafted was introduced, and I became the shepherd of it, one of the principal objections to the bill was introduced by Rodino as head of the Department of Justice committee saying that the bill shouldn't be passed because standardization had some undesirable antitrust aspects.

We may assume that if it should happen in the future that that should appear in the Congress someone is likely to bring up this point and it needs to be considered.

Thank you.

MODERATOR SIMPSON: Yes?

DR. FORMAN: Mr. Simpson, Dr. LaQue referred to you as having written a bill. Was he referring to you, Mr. Simpson? And if so, can you identify the bill for the record?

MODERATOR SIMPSON: He's probably referring to the International Voluntary Standards Cooperation Act.

DR. LaQUE: House Bill 7506.

MODERATOR SIMPSON: House Bill 7506.

He remarked on my impartial comment which he said is inaccurate with respect to antitrust. That goes to show you that a Moderator should moderate and not comment.

I might say that I believe that there are subsequent events where the subject has been discussed and I know it's always a concern for a lawyer. You'll never find a lawyer saying in advance that any group of people can get together for any purpose and not have at least a question of antitrust raised. But I think, personally, that my personal opinion is that that is completely overblown.

Yes? A comment down in front and then one up in back.

DR. PODOLSKY: I'm Leon Podolsky and I'm a speaker on the program here today and I speak on my own behalf. There are two points raised here, on which I may be able to shed a little light. First of all, the antitrust activity.

There are definite antitrust implications with regard to all standardization and all certification activity and the Department of Justice has intervened on many occasions, however, in all fairness we must say that the Department of Justice has also been very cooperative.

Dr. Forman was instrumental in getting a ruling from the Department of Justice which clearly explains the circumstances and conditions under which the United States could participate in the international certification system on electronic components. The development of the so-called IECQ system, as far as the United States participants are concerned, has been guided by that ruling and opinion.

There are antitrust implications. The points that have been made by the Department of Justice have, in several ways, been a limitation on what the United States could do, on the extent to which it could participate and the ways in which it could participate.

Those questions are still being settled but nevertheless there are antitrust implications. The Department of Justice has been helpful, at Dr. Forman's request, in setting out for the first time, I believe, in history, before the fact, the clear rules under which U.S. citizens could participate in the system.

A second point I would like to make, it should be understood very clearly here that in France, in Japan, and Great Britain and Sweden and in many

other countries, the contributions made by those governments to their international standards activities represent the totality or include the totality of the dues to such organizations as the ISO and IEC, whereas for the United States, industry, through ANSI, pays all the dues with no government contribution.

There is a very substantial amount of money that comes totally out of the private sector.

MODERATOR SIMPSON: We have a question, I believe, at the lower right.

MR. MacNAMARA: I'm Tom MacNamara from Honeywell and I have a question as a follow up to the discussion about the cooperation between government and industry and funding by government of the programs and the international standards work of our trading partners.

My question is: Where does the final authority lie in this type of a cooperative arrangement for national positions on technical issues in policy matters in international ISO and IEC discussions: I'm speaking of Germany and France --

MR. McADAMS: I think this is a very good question and as you remember at the beginning of my speech I said that I was unable in the time that we had to examine the procedures and practices by which positions are established.

There is very little information available on that but my observation in international work is that the government people participate in advisory groups much like we have in the United States. And they do not dominate the positions anymore than is the case in the United States. They have a cooperative program.

There is a great deal more pressure in Western Europe for anything that will unify the Western European market and governmental people are involved and in some cases may take a play away from the industry people because they want something done for the benefit of the overall community.

In fact, I was just reading an article in the Europe Magazine which is published by the Common Market and it points out that there may need to be formed under the new European parliament a special committee on standards for Western Europe, which is rather surprising.

This is a total government operation. They've just recently established a parliament in the Common Market and one of the main leaders of that organization is already advocating that we have a standards operation under that parliament somewhere.

MODERATOR SIMPSON: Any other questions? One down here.

MR. HENNESSEY: I'm Ralph Hennessey, the Executive Director of the Standards Council of Canada and I can answer Mr. MacNamara's question insofar as the Canadian's position is concerned.

The buck stops with the Standards Council of Canada. More specifically, if you have a policy matter concerning either ISO or IEC, the Canadian position is established by the Canadian National Committee on ISO or IEC, as the case may be.

On very rare occasions the policy question may be of such substance that the national committee chooses to refer it up to the Standards Council, itself, or its Executive Committee for the establishment of a position. On technical matters it is very rare that a Canadian position is not established in the appropriate advisory group.

On occasion there may be sufficient significance to the matter, the technical matter, in the eyes of that committee that they wish for a superior guidance in which case they will go to the national committee concerned. But as I say, that is entirely within the Standards Council system.

MODERATOR SIMPSON: Ralph, as a follow-up to that, maybe it's implicit in the previous question but in the Standards Council of Canada you have government and non-government positions numerically outweighing the government.

If you have an issue are you saying that the private sector can out-vote the government, in the Standards Council of Canada?

MR. HENNESSEY: Yes, it's just that that is the mathematics of it. Of the 57 members, 41 are from the private sector.

MODERATOR SIMPSON: All votes are equal?

MR. HENNESSEY: All votes are equal.

MODERATOR SIMPSON: You have a question in the back? Yes.

MR. AMOROSI: Roger Amorosi, Detroit Testing and ACIL.

Bill, would you go in a little bit and give a comparison of the procedures for standards writing, committees of other countries with ours? Specifically, well, this is more of a technical nature. In other words, committees that actually finalize the standards, are they balanced?

How do they handle negative votes and then, last, how do you rate the

standards that come out of these other countries, compared to ours?

MR. McADAMS: First of all, I do not know how the committees are balanced or how good the committees are or how much participation there is. I just simply haven't had time to examine that.

My own feeling is that the standards, among our leading trading partners at least, are becoming better and better all the time. I think for many years we operated on the assumption that our standards in the United States were better than anybody else's.

I think that was true to a considerable extent. But I don't think that is true any longer. I think gradually over the years the trading partners have improved their standardization and they have tightened up on different facets of the standards processes in ways that they had never intended to do before. In some cases they want to standardize things that we would, too, standardize.

It's interesting that you raise this question because Germany is taking a hard look at that at the present time and is trying to determine if they aren't over-standardizing in certain areas.

But I really can't answer the question in depth. I think if we are ever going to consider the operation of any new system for the United States, we have examined how standards should be developed and whether we want the same kind of participation in international work that we have in national work. I think we have to reexamine the systems all over the world.

In the time that I had for this paper, it simply wasn't possible to get all the information needed.

MODERATOR SIMPSON: By my watch, which is the official watch at this meeting, it says it is now time for that all-important and perhaps essential coffee break.

We'll reconvene at 11:15.

(Whereupon a coffee break was taken.)

MODERATOR SIMPSON: During the break one of our members of the audience asked "What is the GATT standards code?" Since it's been discussed quite a lot, as referred to in Title IV, I don't propose to explain it to you but if someone doesn't explain at least the essence of the GATT standards code between now and noon tomorrow, I'll attempt to do so in the afternoon tomorrow.

I'm sure it's probably at least touched on and perhaps explained in detail in one of the papers.

Our next speaker is John Rankine. John's subject matter is Major Problems in International Standardization.

John? John? John's a real "U.S. first" but I always thought he was the President of the Scottish Standards Institute, for some obvious reason.

MAJOR PROBLEMS IN INTERNATIONAL STANDARDIZATION

Presented by: L. JOHN RANKINE

MR. RANKINE: Ladies and gentlemen, good morning.

I could never understand these comments about my accent because I don't believe I have one. But thank you anyway, Dick.

In accepting the invitation to speak at this Conference I was faced with the dilemma of just what aspect of international standards to talk about. Fortunately, my good friend Howard Forman and the organizers of the Conference made that decision for me by assigning me the subject "Major Problems in International Standardization."

What are the major problems of international standardization? What should be done to solve these problems? These questions are simple enough to ask but as is most often the case, difficult to answer.

The situation is not unlike the one faced by the golfer who teed off the ball, missed three times, hit on his fourth swing, and then turned and said: "This is a difficult course, isn't it."

For those of us involved in international standardization, and there are many of you here at this seminar today, international standardization is indeed a difficult course. Lately in the United States I feel that too much time and effort has been spent missing the ball by questioning the U.S. voluntary standards system which supports U.S. international standardization activity and I feel not enough effort has been devoted to hitting the ball and playing this difficult course.

Today, at the risk of going over par, I would like to play that difficult course for you, not in my capacity as Director of Standards and Data Security for IBM nor as an ANSI Vice President, nor as Chairman of ISO-TC-97 on computers and information processing but rather from a personal point of view as an individual who has been involved in international standardization activities for more than a dozen years.

However, as some of you know from my accent, and I guess I do have one, I am a Scot by origin and it has been said that a Scotsman is the only golfer who won't knock a ball out of sight. It is certainly not my intention to try to do that with you today in discussing international standardization, but the analogy to the game of golf is appropriate because I personally feel that the problems we face are not the golf clubs we are using -- that is to say the standards organizations -- or the existing mechanism in the U.S., but rather the way we swing. The way we play the course. That is: Our own actions.

When I speak of our own actions I mean the collective activities in the United States represented by users, producers, consumers, and the government. Both the public and the private sector. That's what determines the effectiveness of the U.S. on international standardization talk.

What concerns me most and what I most often hear from many of you is that today our own actions, our effectiveness, has been weakened by a lack of cooperation between the groups interested in standardization. Particularly between the public and private sectors.

What has resulted is a polarization that serves only to weaken the work being done so diligently by so many individual U.S. participants who provide technical expertise to the international standards projects in which they participate.

Frankly, too often we are playing in the rough and when we do everyone suffers. What needs to be done is to get the ball back on the fairway. Some of you will probably say that this outlook is far too optimistic and conservative and I am avoiding some of the real problems in the system as it exists today.

I hope not for that is not my intent because I believe there is a very real problem in the system as it exists today. For the most part, however, I do not perceive this to be a problem of organization or with the system itself and I don't want to see us waste precious national resources on what someone once said: "Fixing what ain't broke."

The problem exists in ourselves. Ever since I had the privilege of entering the field of national and international standards, I have held the belief that the real problem rests not with our system but with ourselves.

I believe the U.S. today has within the government and the private sector all of the mechanisms it needs to maintain its leadership in the field of international standardization. The need is for us all to work together to make sure that existing mechanisms work superbly well.

The national interest is best served when all of the parties involved work cooperatively and it is diminished when individual interests and ambitions are allowed to run free and continually proposing new mechanisms

that satisfy individual whims and ambitions over national needs and interests. The international standardization course is difficult enough to play but some claim that what is needed is to redesign the course, to move the trees and move the greens by mounting -- as an example -- ISO and IEC into one organization.

I can't help question what that will really do to improve our score, to strengthen the U.S. influence and effectiveness in international standardization.

It is frequently argued that these organizations are duplicative and that if they are merged there would be very considerable economies to be obtained.

I had the pleasure of chairing an ad hoc group of the ANSI International Standards Council last year which addressed this question. This ad hoc group was correct in recognizing that gradual steps should be taken to establish common procedures and strengthen working relations so as to converge ultimately on a single voluntary standards organization internationally.

In essence, the recommendations made by the ad hoc group were evolutionary rather than revolutionary and I would commend them to those of you who might be interested in this aspect of streamlining international standards affairs.

Others complain that the U.S. is forced to play the course with an undeserved handicap, that the U.S. does not have a strong enough voice in international voluntary standards because, one, the system is essentially a European club and, two, the U.S. government is insufficiently involved in the process.

As far as the voluntary standards system being a European club is concerned, we must bear in mind that a club is what its members make it. By their proximity to Geneva, there is no doubt but that the European nations can and do play a very strong role in both ISO and IEC.

This is not to say that the U.S. is on the outside looking in. For example, the current president of IEC, whom you have just heard, is from the United States as is the Assistant Secretary General of ISO.

Since its inception the U.S. has held the seat on the governing body of ISO and also on its Executive Committee and planning committee. Furthermore, some years ago ISO initiated a long-range planning committee on which ANSI was most active.

The Pacific Area Standards Congress, PASC, a very influential body in helping assist the affairs of ISO, was also initiated by action of the American National Standards Institute. In addition to many other benefits,

the Pacific Area Standards Congress provides the mechanism for Pacific area countries which are distantly located from Geneva, to get together, exchange views, and decide on common courses of action which can help strengthen the operations of both ISO and IEC.

On the question of U.S. government involvement in the international standards process, it seems to me that the U.S. government has been very properly and fully involved over the years.

The former Deputy Assistant Secretary for Products Standards was not too long ago the President of ISO and before that he held the positions of President of the American Society for Testing and Materials and also the American National Standards Institute. I speak, of course, of my good friend, Dr. Frank LaQue.

The U.S. input to the objectives of the Pacific Areas Standards Congress which had its initial meeting in Hawaii, was drafted by a U.S. trade representative, a former deputy assistant secretary for Product Standards and a member of ANSI.

Over the past years U.S. government officials have been involved in ANSI delegations to PASC and to the ISO Council. Officials of the U.S. Department of Commerce and the U.S. Office of the U.S. Trade Representative have made many distinguished contributions as members of the American National Standards Institute, International Standards Council, and through their key positions, also in the GATT.

At the technical committee level the U.S. government has provided equally distinguished service. Scientists and technical personnel of the National Bureau of Standards have made excellent contributions through their work and standards committees worldwide.

In the field of information systems, with which I am most closely involved, NBS personnel have chaired for many years the U.S. technical subcommittee on data elements and also the international subcommittee as well as the U.S. subcommittee on computer interfaces.

These U.S. public and private sector initiatives on areas of cooperation, have in my view placed the U.S. second to none in the field of voluntary international standardization.

There is no country in the world that has not made use of U.S. national standards, standards which in many cases have become ISO and IEC standards as well as the national standards of other nations.

Who in the international standards world has not heard of the standards of ASTM, UL, NEMA, ASME, IEEE, SAE, or the U.S. federal government,

etcetera, etcetera? Yet, I often hear that the U. S. must reorganize and pattern itself along the lines of Canada, Germany, or some other standards organization.

In this world there are many ways of doing things and we certainly can learn from them all, but different cultures grow in different ways and from them evolve different systems and doing things, for the most part based on very sound, good, and pragmatic reasons. That is why I feel the best safeguard for protection of U.S. interests is to strengthen the U.S. member body in its role in both ISO and IEC.

A strong, effective American National Standards Institute supported by all interested parties is the way to play the course, the way to improve our score.

The U.S. voluntary standards system with its built-in checks and balances of government, user, consumer, and producer involvement is a unique system which has evolved sensibly to serve our nation well, nationally and internationally.

Certainly let us look at the Canadian, German, British, French, Italian, Swedish and whatever other systems there may be and learn from them whenever and wherever we can. But in the final analyses, let us do it in the U.S., the U.S. way to best serve U.S. needs.

I feel like I've played the "front nine," the first part of the course. Now, let me try to walk the rest of the course and end up back at the clubhouse. If my play so far seems to give strong support to the need for confidence in people and organizations that are in place today, working in support of international standardization, then I feel that I am playing my game at par because that's exactly how I see the situation.

"This is all very well," some of you may say, "But things have changed. We now have a GATT code of standards and there is Trade Agreements Act. You have to redesign the system to meet these new requirements."

Frankly, I have a great deal of difficulty in understanding why. The U.S. voluntary standards system is entirely consonant with the spirit of the GATT and as far as the Trade Agreement Act is concerned, it provides a mechanism to fill a valid need, namely, for the Secretary of Commerce to identify specific situations where the U.S. government needs to be involved on a case by case basis in order to enhance the operation of a system which the Act itself regards as generally adequate and in several aspects, more than adequate.

As such, the Act is a very good example of the U.S. system evolving and adapting as it should to meet the needs of government and private sector cooperation in the international standards field.

The Act, as I see it, is designed to facilitate government participation with and in the U.S. voluntary standards system as it exists and as such it does not require the system to be redesigned to fit the Act. Support of the system as it exists today has never been and should not become a burden to the taxpayer or a government bureaucracy that requires tax dollars to sustain it.

In this respect, the U.S. government must be cautious in its desire to give support. At present, in the United States, having an organization such as the American National Standards Institute, has made the U.S. participation in international standards financially possible, technically viable, and overall very successful.

I encourage you to join with the American National Standards Institute in its efforts to improve our play on what, admittedly, is a very difficult course. In so doing I am reminded of the young man who was being initiated into the mysteries of playing golf and asked the club pro: "Which club do I use to make a hole in one?"

Well, no such club exists and never has and it probably never will. But given the dedication to a truly cooperative working spirit amongst all interested parties there is no doubt but what we can continue to be winners nationally, and internationally.

The United States federal government should determine where the existing voluntary system can best utilize government support to assist on a specific case by case basis where there is clearly a proven and established need.

Next there is a need to enhance the current government organizational consumer and producer interfaces via the American National Standards Institute with the international voluntary standards system by optimizing working relationships among all involved as opposed to redesigning the system.

After all, the real test in the game is not "keeping out of the rough at all times," but getting out after we are in. None of us wants the U.S. to be like the golfer in the rough who asked the caddy: "Why do you keep looking at your watch?" And the caddy said, "It isn't a watch, sir, it's a compass."

That is really the challenge we face and if we each approach our responsibility pragmatically, patiently, and cooperatively; if we have the vision to see beyond the limits of our personal interests; if we have the wisdom to take national actions rooted in reality; we can insure a style of U.S. leadership and international standardization which will serve not only all of ourselves, but also all of mankind.

Thank you.

MODERATOR SIMPSON: Thank you, John. I know that John didn't purposely omit the most important hole of golf, which is the 19th hole. And maybe the questions and answers will discover something that you play there.

Questions for John? Comments? This always happens at a conference like this. No one has a question so the Moderator is supposed to ask one. Well, we have one down here.

DR. LAQUE: Frank LaQue again. I will relieve you of the problem of getting the discussion underway. It's common practice on my account.

I think that John's reference to not fixing what ain't broke has a certain simplistic attractiveness however I think he, I hope, will agree that room should be left for preventive maintenance and also room should be left for the possible introduction, as it might emerge, of a new and improved model.

Perhaps I should correct the record a little bit, as I understand his reference to the sequence of events in which he used me as an example of government involvement with ANSI and ISO. The actual sequence was that I became president of ISO four years before I became Deputy Assistant Secretary of Commerce.

I think he should search for a better example of the involvement of the government official in ANSI delegation to the ISO because the one that evolved at that time wasn't a very good example.

I was at ISO in my capacity as immediate past president and I ran into some members of the U.S. delegation to the ISO Council in the lobby of the Richmond Hotel. They said that they were having a briefing session in an adjoining room and suggested I might like to sit in to see what positions they were thinking of taking on matters that were to come before the ISO Council.

So I went in and sat with them and immediately afterwards the then head of the U.S. staff concerned with the delegation came in and said, in effect, "What in hell are you doing here? You're not a member of the delegation."

So I got the impression that I wasn't welcome.

(General chuckles.)

I had the impression also from what John has said and I believe it's actually the case, that that was an isolated incident and it doesn't now represent ANSI's policy about welcoming government officials who sit in with their delegations.

So I suggest, John, that you find a more modern example of what the actual state of affairs is. Thank you.

MR. RANKINE: May I comment?

MODERATOR SIMPSON: Yes, please.

MR. RANKINE: I certainly accept Frank's advice on preventive maintenance, before going out and buying a whole new set of clubs which I don't need. But regarding his comment on his life history, obviously Frank knows that much better than I do and I will also vouch for his expertise in that field.

But the basis on which I was using Frank as an example, and I still think he's a shining example, is of a man who has been with industry and with government, who has led many prestigious international organizations and activities in the field of international standardization and therefore continues to be, in my mind if you will permit me, Frank, still the best example I know of, of government-industry interaction with a very distinguished career behind it.

I think it is still a very good example of that.

MODERATOR SIMPSON: Questions or comments? Yes, over that way.

MR. FELDNER: Louis Feldner, the Federal Communications Commission.

Mr. Rankine, how do you see the United States being affected by international standards activities related to public data networks and international information networks?

MR. RANKINE: I think that's a very good and key question, and my answer to that would be: broadly, very considerably affected. For that reason I think it is absolutely essential that we establish the working relationships at the technical level, on the closest basis between the two key organizations involved, namely the CCITT and the ISO and also of course where appropriate, the IEC activities.

I think that all of these need to work very closely so that we come up with decisions that are truly oriented to user requirements worldwide. A very key area.

MODERATOR SIMPSON: Any other questions or comments? Yes. Down here in front.

MR. RANKINE: I'd also mention that the voluntary system in regard to that last question is working very aggressively to foster that cooperation.

MR. REED: I'm Don Reed with the National Marine Manufacturers Association and my question, sir, is for you regarding your comment as to how the Department of Commerce might exercise a role in deciding on a case by case basis on how it might enter a particular activity.

In my particular case my experience has been with ISO-TC-70 where I have been a U.S. delegate going on now the 12th year. In many cases government participation from one agency or another would have been very helpful in this past time. I guess the question that is in my mind specifically has to do with how, once the Department of Commerce had made a determination that some help was necessary, that the necessary expertise might come to the particular activity through some other government agency such as, for example, the Coast Guard or the U.S. Army Corp of Engineers.

Can you comment on that, please?

MR. RANKINE: I'm sorry. I didn't quite understand the last part of the question.

MR. REED: Once the Department of Commerce had made a determination on a specific case basis that some government help was necessary in some particular case, and if that expertise was available from some other government agency, how would this be worked out in the government interface, between one agency and another, to get help from where it is available, namely, a different government agency?

MODERATOR SIMPSON: You're not suggesting, are you, that there might be a problem of cooperation amongst the government agencies?

(General laughter.)

MR. REED: No comment.

MR. RANKINE: If there is, that problem would be beyond my scope to solve but I would think that the interagency activity that has been established in standards would be one vehicle for that.

Then, assuming the government has solved this internal problem, going to the TC involved through the national interface is the next way to get the government actually involved.

For example, in the industry that I am most closely associated with, information processing, on the ANSI committee, the committee that handles that activity, interface with TC-97, and involves at least two government departments, Commerce and Health and Education and Welfare. They each are taking care of their separate interests.

But I think the interagency committee is the vehicle to establish that.

MODERATOR SIMPSON: Anybody from government like to assist with that question? Howard, would you like to answer how you would propose to get the cooperation from the other departments?

DR. FORMAN: I'll take a page from Bill McAdams' comment, I'll wait until the end of tomorrow and find out how.

MODERATOR SIMPSON: Don, a comment on that question? And then we'll go back into the middle.

MR. PEYTON: I'd like to ask a related question. Not a comment, Dick. John, would you like to comment on the problem of government preemption, either at a national or international level, with areas of standardization.

For example, the gentleman from FCC talked about telecommunications standards. The government activity has been going on, as I understand it, since the 1800's. ISO has just barely gotten in. We have the same thing in some of the other areas, food and some of the rest. We have a lot of systems internationally, they are not all ISO-IEC. Yet I think we tend to overlook the fact that we try to say that the international organizations are ISO-IEC. And they are. I mean, they are very leading.

But don't we really have a problem sometimes of unbundling or getting that non-government group, ISO-IEC together with government organizations related to the U.N. Isn't that part of the problem along with what we might do domestically. You might want to comment.

MR. RANKINE: I'm not sure I understand the question quite clearly. But let me attempt an answer, Don, and see if it is the kind of thing you're talking about.

As I understand it, the point you are making is when it comes to interfacing with intergovernmental -- international organizations which are intergovernmental -- such as the IETU and the CCITT, it is very essential in these areas that the government understand the needs of not just the private sector but the users -- and telecommunications is a fine example of it -- that the true user requirements on the broadest basis be understood so the national delegations, government national delegations that interface with these international bodies carry forward a true understanding of the

user need in the broadest sense so as to reflect the requirements of not just the government sector and in this case the PT&T's, the telecommunications entities, but also the other manufacturers, producers involved, and all of the user requirements involved.

It's a very good point, if I understood the question, that of national representation in intergovernmental bodies.

MODERATOR SIMPSON: We have a question up there. Just before we get to that, here is my comment ex-government official on the previous question of: How do we get the government people to come to the committees once we identify a need? I think Howard is going to answer that tomorrow but just as a comment, with the OMB circular that is now issued and with the GATT standards code there are at least two federal documents that recognize there is a valid role for government officials to play somewhere in national and international standardization and it might provide vehicles for them to get funding because often times there might be a will but no way. No bucks to pay their travel, etcetera.

So at least there is a vehicle now for them to start including something in their budgets so maybe if there is a problem it might get easier.

MR. FEELY: Frank Feely, of EXXON.

I'd like to compliment John on bring his perspective on this matter of where we stand today and the vehicle that we have for participating in international standards and the fact that it already is operational and whatever we want to do in the future, we have to start from where we are.

I don't believe that he had in mind saying that everything is perfect because we all know that there have been problems and that perhaps the greatest problem which has been alluded to by Bill McAdams and several of the speakers thus far, from the floor, has been the fact that there does seem to be a need for more of a government role in certain situations but at least if not that, at least for a better definition of what is an appropriate government role.

One of the issues that has been talked about has been the matter of financing. Money always sort of gets us right down to cases. In the case of financing the present system, of course, is one of voluntary contributions in financing the U.S. participation in ISO and IEC, without the government playing a role.

I think the concern in this country, which again comes from our culture, is that the government really, if it were to take a specific role in financing, would require some kind of controls. And that immediately makes all of us from private industry worry, "Just what does that mean?" It's the

fear of the unknown again.

Obviously, if we could go to immediately put ourselves into a culture such as Germany or Canada where they feel that they have money without strings, it would ease the load.

I think a question can be raised as to what it is that we haven't done that we should have done and we would have done if we had the appropriate financing. And the vehicles you have just spoken to, Dick, through the GATT and through the OMB, should provide such a vehicle.

I hope that what will come out of this meeting today and tomorrow is some definition of the things that might be done, or a modus operandi that might apply. We all know, we that have worked on this problem, that there are international standards activities where it is a real strain to get the right participants and to get the money to support them.

Just for one thing, that is something we could work on. I think that is enough but I'd like to say we are where we are, and we need to progress from there rather than to assume we are going to start something completely new.

MODERATOR SIMPSON: We have a question in front. Someone once said, "Money's not the most important thing but it's way ahead of whatever is in second place." Maybe that's appropriate.

DR. LAQUE: I have no question for John, but I do have a comment.

John, you have said we don't fix it if it ain't broke. I participated in the national and international affairs from the voluntary sector in the United States now for 49 years and probably as long as anybody in the audience.

My observation over these long years is that the strengths and the vigor of a voluntary standards activities of the United States have remained so and remain so today because of the ability of the system to respond to evolutionary change and I submit to you that at this time new genes have been introduced into the evolutionary system.

The new international treaties, the new national laws of the United States are new factors in the equation. I hope in my paper this afternoon to present a proposal which is in response to these new factors and to show how evolutionary change which I believe is needed can now be brought about.

I don't agree that you don't fix something because it ain't broke. I think that you replace it with a new and better machine. You replace it with a more efficient machine. You rebuild the old one to make it work better. You

don't just let it set.

MODERATOR SIMPSON: All the way down the front. While you're going there we'll have a comment from John.

MR. RANKINE: I thought I had mentioned the fact but I'll reiterate it: I do not regard the present system as perfect. The secret of success of the U.S. system is that it has evolved carefully with time to meet the needs of the U.S. culture and the U.S. environment.

The concept of the private corporation, of the independent, the public corporation which is government funded, is somewhat of an alien concept in this land and I don't think a good solution.

I'm not for a moment saying that there are not imperfections in the system that need to be remedied but let's take them on a case by case basis and I do share Leon's view that there are new genes today but if we are going to engage in genetic engineering, my caution is: Let's be very careful that we don't create a monster, that we create something that is truly adaptive to the environmental requirements.

MODERATOR SIMPSON: In front?

MR. MILLEVILLE: My name is Bert Milleville. I'm with Rockwell International.

I have a concern, it's rather basic. I'm going to try to shift the discussion a little bit. It's my impression that we've been addressing sort of the tip of the pyramid. The structure of the Army Headquarters, if I may use an analogy, and what I am suggesting is that some attention is needed for a problem which may be real or may be imagined, but it involves some of the troops where we spend our time down in the trenches.

By trenches I'm referring to the committee meetings of a technical committee in ISO, very specifically, and a very specific case that I believe can be followed and it's not too highly technical and it involves standardization, international standardization of pipe flanges.

This is piping for steam or water or oil or gas or whatever. The dimensions of the things on the ends of two pieces of pipe that you put bolts through and tighten up the bolts to make the pipes fit together and hold pressure and therefore perform.

I think it is easily understood, very generally, that it's important that we have standard dimensions for such items so that if we have a pipe line in Arabia or we have a pipe line in Europe or we have a pipe line in South

America or we have a pipe line in the good old United States that we can fit a new flange or a new length of pipe with such flanges into that piping system without having to cut something out and weld in something with different dimensions.

Now we have been working in a technical committee of ISO to develop an international standard for pipe flanges. There have been American standards for these items for many, many years. There have been DIN standards for these items for many years.

The standards are very different. Initially, many years back when this activity started there was a very real proposal and expectation that the American standards would be abandoned and that they would be replaced by the world standardizing on the DIN standards.

This concern was reinforced by the fact that we know that the U.S. goes to a technical committee meeting with one vote. The Europeans come to a technical committee meeting with a dozen votes. We went to these meetings and we started participating in these negotiations and discussions and developments of an international standard for flanges.

In good faith and in good technical cooperation we have achieved a considerable success, we feel, in this area. We have obtained acceptance of all of the ANSI pipe standard flanges in the new international standards, however, in the final standard the inclusion of standards covering the materials that are to be used in the standard will include the national standard material specifications of other countries, not just the American ASTM standard.

The standards for material specifications of the other countries are, in many cases and in many ways, not as demanding as the ASTM standards for materials.

We are, in our committee work, reminded occasionally and perhaps not in enough detail so that we can truly understand what the problem may be, that if we, the United States, votes in favor of this international standard, then it will be obligatory on them, the United States, that we withdraw our own B-16 ANSI standard for covering pipe flanges and adopt the international standard.

This would mean that conformance with the standard would no longer mean conformance with an ASTM standard specification, necessarily. Imports could come in with an Italian national material specification standard, etc.

What I am asking, and putting as a question, and I think it belongs in a presentation and discussion involving problems of international standardization, is what are the rules regarding the United States participation in the

development of a technical product standard in commitments we make, trade-offs we agree to and we'll give someone these details and the others give other details and we achieve a standardization which is compatible with the United States interests because, indeed, we can pit our equipment with other equipment around the world, if we all use the same dimensional standards.

There are differences in the materials which would be unacceptable under present United States codes and we're touching on the safety of power plants, conventional types or nuclear types which invoke these standards by reference.

Are we going to say that the United States by GATT treaty obligations must abandon its higher standards for such safety-related equipment, if it votes in favor of the international standard? Then it involves compromise and many concessions to the United States on the basic problem of interchangeability.

MR. RANKINE: The ISO is a voluntary international standards organization and I know of no requirement in the case of the United States where a vote on an ISO standard is an obligation on the part of the U.S. to conform to that.

Some countries have made that decision. Denmark, I believe, is an example of that. But I would like to make a sort of general comment because I am not familiar with your particular subject and its ISO standards. I think international companies are certainly very interested in international standards as are many in the user community because they present unified requirements and the more unified requirements can be, the ease of meeting these requirements is facilitated. But it's foolish, on the other hand, to fail to recognize that different countries have grown up, created their own requirements and that ISO, while it is a useful instrument in reconciling national differences and obtaining more unified requirements, certainly cannot achieve that overnight.

There are many vested interests involved, there are many rooted traditions. Regional variations have to be taken into account and I think sometimes we sell the ISO and IEC short if we think that they are a magic wand to overnight solve these national and international differences or even to produce, to view them solely as fulfilling the role of producing international standards.

I think the usefulness of these organizations goes far beyond that. They provide a meeting ground for understanding between the world standards bodies, for recognizing where a single international standard cannot be achieved, and where varying standards might be the most pragmatic ultimate result.

So I wouldn't be discouraged, I would continue in presenting your view but I don't think you should feel under any obligation that an ISO standard, because you have voted on it, is a mandatory U.S. implementation.

I see Don Peyton wants to comment further on that.

MODERATOR SIMPSON: Let me just ask, before we go to other questions: I think it would be useful to pursue this point because there is, well, at least a question is raised and it goes to the very heart of international standardization. If you participate and you vote for it do you have any obligation to use it and does the GATT standards code impose a new obligation other than what existed in the past, in that situation? The private decision-making body.

Does anybody want to comment and help answer that question? Don, is your's directed toward that? All right. Go to Don and then Mel.

MR. MILLEVILLE: I don't pretend to be a learned expert in the GATT code. That's Dick Simpson's and some other peoples.' But the Trade Act,

section 4 of the Trade Act, does give some preference to international standards but it also says that there are many exceptions to the rule of adoption of international standards and two of them, that I can recall right off, one of them is health and safety and the other one is technological differences.

They've got holes as big as, well, you can drive trucks through them. As far as any type of mandatory adoption-- I think your point is well taken. What's happened over the past few years is that some of, and I won't say who, but some of the European delegations have been trying to con people into thinking that if you come to vote for a standard, you'd better take it home and adopt it or else.

We have a little thing in our country called national consensus. We just had a whole bunch of hearings about that with the FTC. If we were to adopt a standard here we'd have to go through a consensus process in this country. We'd have to find out if in fact we have a consensus on the adoption of that standard.

I don't know of anything that is automatic, frankly. Somebody may want to disagree with me but I don't think there is any obligation and I think, frankly, one of our problems is that we have been getting euckered because some people are trying to put the heat on our delegation to say: Do it our way or else.

MODERATOR SIMPSON: Mel, do you want to comment on that? Down in front.

MR. GREEN: Some years ago there was an individual in the Department of Commerce that recommended to me that the American National Standards Institute should have guidelines on voting on international standards.

We developed these guidelines and I believe that is what Mr. Milleville is alluding to. The guidelines for voting on international standards provide, one, that where an American national standard exists, that TAG can recommend an affirmative vote where, a. the proposed international standard is compatible with the American national standard or, b. the committee responsible for the domestic standard is willing to revise the U.S.A. standard to be compatible with the proposed international standard.

You probably recognize those, Dick, because we received this recommendation back in the early '70's when we were involved in an antitrust suit and it was felt that this would protect the domestic standards development organizations if we provided for this compatibility.

So what Mr. Milleville is saying is correct. If we go through this thing and develop an international standard that is based on one of our domestic standards and during this time of development where it is taking you four or five years, the domestic standard has changed -- you no longer have the compatibility to vote on that international standard in the affirmative.

You must get agreement from that domestic committee that they are willing to revise the domestic committee. These are our guidelines. They are in existence now.

MODERATOR SIMPSON: Before I take another comment --

MR. GREEN: By the way, they are American National Standards Institute guidelines.

(General chuckles.)

DR. FORMAN: Mr. Simpson, you called him Mel. Would you identify him for the record since he didn't identify himself?

MODERATOR SIMPSON: Melvin Green from ASME.

Just for purposes of controversy, before I call on someone else to help interpret the GATT standards code or the Trade Act, let me just throw out the proposition that the GATT standards code does in fact impose an obligation that is new.

If in the situation proposed, that the American, that it is an ISO committee and the U.S. delegation votes "yes," on the ISO standard and comes back and does not go through an exercise and does not adopt it in the United States, that it is a presumption of a non-tariff trade barrier and you could be called to task and asked to go to Geneva and explain why.

There is at least that presumption. I propose that the GATT standards code does provide some pressure to you. Anybody like to argue against that?

Down in front. Bill? Mr. McAdams.

MR. McADAMS: I don't want to argue against what Dick Simpson has just said but I would like to throw a little bit different viewpoint on it.

The GATT code of conduct is a document which we have to live with and if we are pragmatic about it, we have to recognize that we are going to be under some pressure to use international standards more than we do today.

The GATT code is going to be applied, not by going around and checking to see who uses standards but through an exemption kind of process where everything is all right unless somebody protests that there is a trade barrier existing within some country.

Now, if a European manufacturer complains that the U.S. has a standard that does not meet the requirements of ISO or IEC then it will be up

to the United States to defend why it is it does not use it. In due course of time we will have more and more of those kinds of cases and we may be able to defend ourselves but at the present time I think the situation in the United States is that we really don't know how compatible our standards are with international ones, at least not in very many cases.

I think that we have to begin examining our situation and make sure that where we are different we can explain the reasons why and if we don't have good reasons then we'd better think twice about looking at the international standards.

MR. RANKINE: If I may, in line with the question that was asked, while the GATT code can impose an imposition in that regard, it can also present an opportunity for solving the problem that was raised in the question.

MODERATOR SIMPSON: Is there another comment on that same question, on this side? Yes. Here.

MR. SCHOCK: Harvey Schock, speaking for myself.

We have clearly defined that one of the things we are trying to do in this meeting is to increase the 8 percent of export GNP to 25 percent, as in competitive countries.

So one of the things we have to realize is that we are not just talking about our internal use of the standards as they evolve but also the fact that they will be adopted has been pointed out in the case of Denmark by other countries as their voluntary and possibly mandatory standards which would thereby cut out some of the export potential for our own country, which could adversely affect the productivity of our internal operations which are required not to meet our own use but also the exporting environment.

I think that also should be considered in our discussions when we are talking about this adoption of the standards because they are adopted in total by these emerging countries.

MODERATOR SIMPSON: I think there was a request back in the middle. Yes. In the middle.

While you're taking the mike back there, I might just say that the situation we are talking about is a situation where the U.S. delegation votes in favor of the standard and, put yourself in the view of the trading partners, it may be a reasonable presumption to assume that if you voted for something you might think it was all right. Might use it.

Comment in the back. Yes?

MR. ABELSON: Don Abelson from the U.S. Trade Representative's Office.

In clarification on the use of international standards, from the point of view of the implementing legislation, when you are preparing, in the future, a national standard, the committee preparing the standard should look to see whether there is a relevant international standard and then base the new domestic standard on that international standard, if appropriate.

Then the code recognizes, as does the legislation, that there are instances in which international standards would be inappropriate. Now, Mr. Peyton mentioned two of those. They are national security interests, protection of human health or safety, animal or plant life health, the environment or the consumer, prevention of deceptive practices, fundamental technological problems and fundamental geographical or climatic conditions.

When a committee decides that it is not going to use an international standard, in the process of making that decision it would come upon some reasons and the reasons might be one of those five.

They are not limited to only those five. The committee would then, it would put somewhere in their record that they have looked to see if they are international standards, they have made the decision that the international standard is not appropriate for this and that reason and it would let it lie.

Then, correctly, as Mr. Simpson has said, we may be approached by a foreign country at some point to justify or explain why we did not use the international standard. It would be there in the records of the committee's decision.

MODERATOR SIMPSON: Let me just specifically ask, do you think it is a difficult situation -- the situation proposed a year from now when a U.S. delegation votes "yes" on an ISO standard and the standard incorporates give and take. They adopt some of the U.S. and they adopt some of the DIN standard. We vote in favor of it and then we don't use it in the United States and some of our trading partners say: Foul. You violated the GATT standards code. Come over and explain why.

Do you see that as a difficult situation?

MR. ABELSON: A trading partner who has signed the standards code could always claim foul. And we would be in the situation of first sitting down with them. Not going to Geneva but sitting down with them and discussing the problem.

We would be bound to go to Geneva if they filed a formal complaint. There is no obligation to use international standards. There is an obligation to base standards on international standards when they are appropriate and

that is a very different kind of obligation.

MODERATOR SIMPSON: I think we're beating this to death. Is it considered to be appropriate that you might have made a decision that might be appropriate if you voted for it?

MR. ABELSON: We had one discussion in Geneva that I remember and the decision of the group drafting the standards code at that time, and this might be two or three years ago, was that indeed if you voted in favor of an international standard that should not prejudice your case in the future.

This was an informal discussion among code negotiators.

MODERATOR SIMPSON: Mr. Rankine would like to ask a question of the present speaker and then we'll go up to the gentleman just to his right.

MR. RANKINE: I really shouldn't be asking a question but I think it bears on the question that was raised. Perhaps one of the government officials could answer it.

It is my understanding that a U.S. government representative, casting a vote in the standards committee, when he casts that vote it places the government under no obligation, the U.S. government, under no obligation whatsoever to implement the standard.

Is that correct?

MODERATOR SIMPSON: Would you like to try to answer that?

MR. ABELSON: I don't know the answer to that.

MODERATOR SIMPSON: The question was, John's understanding was that the GATT standards code --

MR. RANKINE: No, that it was a U.S. government requirement that one of its representatives casting a vote in a standards committee placed on the government, no obligation on the U.S. government, to implement that standard.

MODERATOR SIMPSON: I think that's probably true. I think the person participates as an individual but I think that question is one that bears on the issue of what does the GATT standards code really mean and I think it applies to private as well as governmental international standards acts.

It says you should try to use international standards instead of national standards in those areas where they are appropriate and it recognizes

that in the past they have created unnecessary barriers to trade and it provides the opportunity for your trading partners to complain if they think you are using a standard as an instrument of a commercial trade. In other words, to freeze out exports.

In the code there is a presumption that says one way that you can determine whether or not you should have an obligation, clearly at the technical level, you vote against the standard, you had reasons. So someone couldn't claim that they were surprised later on that you didn't use it.

But if you vote for it, the question is, is it a reasonable presumption that you might use it and might you not be called up if someone complained and I think the answer is, you might be called up and there might be a perfectly reasonable explanation. It's not a high enough level of safety. It's not in our national security interest, those built-in exemptions.

But if in fact, in the situation proposed, the technical committee recognized trade offs, they recognized that there was no inherent problem -- that we preferred our standard over theirs and there was some give and take. It may be the type of situation, it may be the type of situation that is in the gray area. You need more specifics. But it may be the gray area where some pressure would be brought to bear because of the GATT standards code, to cause you pressure -- not force, not rules -- but pressure might be brought to bear to cause you to change your national standard and align it.

That is the type of situation that was in fact envisioned by the GATT standard code and it wants that pressure to be brought to bear. And it will. In my opinion.

MR. RANKINE: Conversely you can use the code to argue the case the other way around. It may be someone else.

MODERATOR SIMPSON: It cuts two ways.

We are into our lunch period. I'm going to terminate the discussion. As with all of these discussions, when there are more things that need to be said, if they aren't brought up in the Q and A, or in other papers, I remind you that there is a section tomorrow afternoon which is a continuing dialogue.

We are now adjourned until 1:45.

(Whereupon, the meeting adjourned for lunch.)

MODERATOR SIMPSON: I might ask Dr. Podolsky, who will be our next speaker, to come up. His topic is: A Proposed New Structure for U.S. Participation in Voluntary International Standardization.

DR. PODOLSKY: Good afternoon, ladies and gentlemen.

A PROPOSED NEW STRUCTURE FOR U.S. PARTICIPATION IN VOLUNTARY INTERNATIONAL
STANDARDIZATION

Presented by: Dr. Leon Podolsky

DR. PODOLSKY: Contrary to the belief of some, the world of international standardization has changed drastically in the past several years due both to governmental pressures in many countries and the increasing needs of world trade. The impact of standards and certification systems on trade, and the growing potential for technical barriers to be erected, has stimulated both national and regional organizations to pay critical attention to these problems.

The culmination of several years of concern and effort was the Code on Conduct on Standards and Certification that was concluded as part of the the Multilateral Trade Negotiations Trade Agreements Act of 1979, to which the United States is a signatory.

It may give you some index as to how long it takes to bring about such an international improvement. Dick Simpson and I were the originators, proposers, of this international code of conduct, ten years ago.

The Trade Agreements Act of 1979, which was passed by Congress in its Title IV, imposes on the Department of Commerce and the U.S. Trade Representative very substantial responsibilities for cooperation in and support of the international voluntary standards activities of the United States.

Now, both by international treaty and U.S. law, there is for the first time in history, both a recognized need and a legal basis for private sector and government agency cooperation and support for international standards effort.

Such cooperation is essential to the health and continued growth of U.S. foreign trade. It is vital to the preservation of existing markets for U.S. goods in competition with other developed countries, and it is even more vital to the trade opportunities in the developing countries.

Our international competitors have lost no time and they are sparing no effort to make the weight of their standards preferences known and felt throughout the world. We have already seen the great intensification of their effort in the ISO and IEC.

For 75 years, the United States has participated and led in international standardization in the electrical and electronics fields through the U.S. National Committee of the IEC, which is now a wholly integrated body of ANSI.

For nearly 35 years, since its inception, we have participated in the other fields of international standardization through the ISO. ANSI is the U.S. member of both the ISO and the IEC, and both organizations, by statute, require such a single member body in each participating country.

The participation of the United States in these organizations, supported wholly on a voluntary basis by industry, has generally been effective and competent.

However, there are some gaps and uneven applications of national interest and support depending on how vital particular industries see their international trade opportunities, or conversely, the possible adverse impact of standards on competing nations.

There are, in addition to ISO and IEC, several other international voluntary standards writing organizations, and a substantial list of governmental treaty organizations which write international standards, where neither the voluntary sector nor government have participated adequately or effectively.

The pressures of the GATT Code, the OMB Circular A-119, and the requirements of Title IV of the Trade Act of 1979, have dictated a new look at how the United States should be structured for proper participation and management of our international standards efforts.

ANSI, the coordinating body for its federated members in international standardization, promulgated a new international standards policy in December 1978, which carefully addressed both the responsibilities of the voluntary sector and its relationship to the governmental treaty systems.

Now I will not detail here that widely publicized policy, but I refer to it completely in the Appendix number 1 to this paper, which will be published. At the time of publication of that far-reaching policy, that is, December 1978, the GATT Code had not yet been developed. The Congress had not yet considered the new trade bill, and the OMB Circular was only in the beginning stages. Yet ANSI did foresee the problems and did develop a policy.

The finalization of all three of the latter documents led the ANSI Board of Directors to instruct its International Council to study in depth the ANSI structure necessary to carry out its responsibilities for international standardization, in the light of these documents, to find the basis of financing the proper activities, and most importantly, the proper relationship and interface of ANSI, representing the private sector, to the federal government.

The ANSI International Standards Council is an appointed body of representatives of ANSI federated members and certain governmental and individual experts. It is an advisory body to the ANSI Board of Directors. The International Standards Council acted on its charge by appointing a working group to carry out its assignment.

It was my honor and privilege to be named chairman of that working group, whose other members were: Dr. Lawrence Eicher, of the National Bureau of Standards; Dr. Howard Forman, of the Department of Commerce; Mr. C. Ronald Lowry, the Director of Engineering of the Aerospace Industries Association; Mr. Jerome B. Schapiro, President of the Dixo Corporation; Mr. Gerry T. Underwood, Deere and Company; Mr. Vincent Travaglini, of the Department of Commerce; and Mr. Robert Szydlowski, of General Motors Corporation, who is the Chairman of the ANSI International Standards Council, and who served ex officio on the working group.

The working group met five times over the period from December 4, 1979 to July 15, 1980, to consider proposals and working papers submitted by its members. In addition, the members of the working group met with private sector representatives and representatives of trade associations, professional societies, and of governmental organizations, to obtain comments, recommendations and input. The working group arrived at unanimous conclusions with a separate concurring report by Dr. Forman.

I underline the word, unanimous, because it is most unusual, in my long experience, that a mixed body of this kind, of governmental and private sector representatives, could come to a unanimous set of recommendations with regard to the operation of a very important system within the private sector.

The working group has submitted its report to the International Standards Council, which has so far approved its purpose and its scope. And it has approved the submission of these recommendations to this national forum for public review and comment. In December, these recommendations in final form will be submitted to the ANSI Board of Directors.

Now, the following is most important. We believe that what we have proposed is a new dawning of international standards effort by the United States, a Magna Carta, if you will, of a new cooperative relationship between

the private sector and government to more efficiently coordinate, operate and financially support our international standards work in the best interests of all concerned national entities.

The principal findings and recommendations of the working group, as given in the executive summary of its report, are as follows:

First, the working group found that the present structure and support of ANSI for International Standardization are not adequate, in view of its increasing responsibilities and the required close working relationship with the federal government to implement Title IV of the Trade Act of 1979, the GATT code, and the OMB circular A-119.

Secondly, the working group recommended a new structure for the ANSI International Standards Council to make it a strong policy and operating committee, with joint voluntary sector and government membership reporting to the ANSI Board of Directors.

Third, the detailed structure and charter of this new ANSI International Standards Council are still under discussion. They can be summarized as follows, and I quote directly:

First, the purpose as stated is to "Promote the development and use of standards which best serve the common needs of the United States government, the general public, industry, technology, and international trade. In pursuit of these interests, the International Standards Council shall encourage and support the development of standards which have the potential for worldwide acceptance by virtue of their technical excellence and the quality of practical international acceptability."

And, secondly, and I am still quoting directly, "the scope of this new International Standards Council, the ANSI International Standards Council, is to be the policy and operating body of ANSI for all its international standards activities, including relationships with the federal government."

"The proposed membership of the new ANSI International Standards Council is to consist of not more than 30 members, representing the following presently identified constituencies which are shown in figure 1. That is, first, the councils, boards, and committees of ANSI. For example, its Executive Standards Council, the U.S. National Committee of the IEC, and the other existing ANSI bodies which have impact on its international standards work."

"Secondly, representatives of the major standards developing organizations. That is, all the professional societies, all the trade associations, which are now standards developing organizations in their own right, should be properly represented."

Third, consumer interests. Fourth, certification and testing bodies. Fifth, representatives of the U.S. Department of Commerce, officially. Sixth, representatives of other departments and agencies of the federal and state government who have interest in the international standards activities.

Next, academic institutions, because many of them do provide technical expertise, which is important to our international standards work. And, lastly but certainly not least, proper representatives of small business interests who have a need and a voice in this international standards work.

All members of this 30-man board are to be nominated by the constituencies they represent, in accordance with due procedures which are still to be established. The rules will determine the numerical representations for the various categories.

The proposed officers and terms of office are detailed in the full report.

The functions of the new International Standards Council are to perform and have responsibility for, or the delegation of, and I repeat those words because they are very important in the following context. That is, to have responsibility for the delegation of the following functions:

First, the implementation of the ANSI international standards policy, as set by the ANSI board of directors in all its aspects including interfaces with government under the Trade Act of 1979. Now that policy, I repeat, is attached to Appendix 1 of this paper.

Second, the identification of those international standards organizations in which it is in the national interest for ANSI to hold membership and to qualify for and participate in such membership.

Third, to determine the private sector organizations and entities in the United States having interest in or being affected by the identified international standards organizations, and to ensure their participation in and support of U.S. activities therein.

To develop and secure publication of information on international standards activities.

Fifth, to organize committees, task forces, and other structures necessary to the establishment of U.S. positions on international standards matters.

Sixth, to identify and nominate competent U.S. delegates to meetings of international standards writing organizations and committees.

Seventh, to assist small business organizations in their input to international standards matters.

Eighth, to determine the costs of U.S. participation, adequate representation, and other costs, and to develop ANSI budget recommendations to support those costs.

Ninth, to make recommendations as to costs which might be borne or supported by government under Title IV of the Trade Act of 1979. To work with ANSI in developing proposals to government agencies such as the Department of Commerce or the Office of Trade Relations for such support.

And, tenth, to develop systems for international standardizations and the required input and coordination with national standardization.

The International Standards Council, as reconstituted, will be required to report its activities semiannually to the board of directors of ANSI and to such governmental agencies as may be required by grants or contracts.

The ANSI board of directors should periodically review the membership of ANSI in international nontreaty standards organizations. Responsible government agencies must do likewise with respect to treaty organizations.

The working group recommended that the first function of the new International Standards Council, after establishment of the operating rules, should be the development and conclusion of a formal agreement between the Department of Commerce and ANSI as the private sector federation of standards developers and users. Appendix 2 to this paper shows such an example contract which was developed in detail by the working group.

The working group considered several approaches to achieve the kind of relationship and support that is needed from the Department of Commerce, and it believes that the proposed agreement is the most practical approach to take at this time. It has the advantage that it could be implemented relatively expeditiously and bring about needed improvements in the nation's standards activities in the very near future.

The working group concluded that to be fully effective in the international sphere, U.S. international standards activities must be based on an effective national standards policy and organization.

While it was outside its own scope, the working group urged the separate ANSI working group on implementation of the proposed national standards policy to give consideration to a new ANSI structure which is shown in the figure 2, with a possible suggested national sector coordinating committee structure as you see in figure 3.

Now, please, looking at this do not look at this as a proposed structure. It is intended only as a functional diagram to show functions which need to be performed and which must be coordinated. The ANSI board of directors would remain the active controlling board for the private sector. The new structure, which we foresee and which we have suggested to the committee working on the implementation of the national standards policy, is to give consideration to having a "National Standards Policy Council" equivalent to the "International Standards Council," which I just described to you.

Now, as most of you know, ANSI each year has, in the spring, a "National Standards Update." We are suggesting that there be, perhaps at three-year intervals, a "U.S. Joint Standards Conference," national meeting, if you will, similar to the meeting today, of all people interested in national and international standards matters for the United States.

So the recommendations of such a joint standards conference might help to develop a policy for the United States for implementation of both the national standards policy and of the international standards policy as they are operated by the National Standards Council and the International Standards Council.

There would remain in being a small policy committee to see that the recommendations of that "Joint Standards Conference" were passed on to and acted on by the national standardization sector coordinating committees which I will detail in the next slide.

Now, remember, my opening statement with regard to this figure? It is not intended to be a structural recommendation. It is intended to be only an exposition of functions which need to be performed, if, in fact, the international standards activities of the United States are to be properly coordinated with the national standards activities.

Referring to figure 3, we are proposing here that there be national standardization sector coordinating committees, a sector being a functional area of industry of national interest -- the electrical industry, the automotive industry, the chemical industry, and so on, are national sectors -- that there be domestic and international functions in each of those sectoral committees, that there be input from industry, that there be output from the international side of the ISO and the IEC, and that there be technical committee work coordination for those bodies.

And we've shown in figure 3 that under sector coordinating committees there would be the the actual standards writing bodies. None of the superior committees would write any standards. The standards would continue to be written by the national standards sector program committees. NFPA, ASTM, SAE, RMA, EIA, ASME, are simply illustrative ones. And in a single one, each organization would have its own standards development committee with input

from consumers, users, manufacturers, and government, etcetera.

The implementation of all this would result in essentially a new ANSI structure, with coordinated national and international standards councils.

Now, these structures may or may not be ideal, but they do indicate a basis for greater coordination of national and international standards activities.

The working group clearly highlighted the critical need to coordinate both American national and international standards activities in a single body such as ANSI. It cannot be otherwise.

Now, all of you present here today and everyone throughout the nation interested in a strong and effective structure for the United States participation in international standards activities are urged to obtain and study carefully the full ANSI report. It is available directly from ANSI.

Our working group remains in being and it is anxious to hear your discussion today and to receive your constructive suggestions. These will be considered by the working group and will be included in a final set of recommendations which will be given to the ANSI board of directors in time for its December 4, 1980 meeting.

Now is the time for all elements of the private and public standards communities to provide their input and support to this new initiative. Don't sit back in your organizations and snipe at ANSI. Don't sit back and criticize U.S. international standards activities or national standards activities. Now is the time for you to give us your constructive suggestions, to give us an opportunity to factor them into this set of recommendations. Now is the time to begin building a strong, effective international standards organization coordinated with our national standards organization, in the nation's best interests.

I point out to you in closing: this report is a very remarkable one in my nearly 50 years of experience in this field. For the first time a committee of government and private sector individuals has developed a structure in the national interest and has still recommended unanimously that this function be left in the control of the private sector, the ANSI board of directors.

(Applause.)

MODERATOR SIMPSON: The floor is open to questions, comments, discussion. Dr. Forman, are you calling on yourself?

DR. FORMAN: With your permission, Mr. Moderator, I want to make a comment for the record. Since Dr. Podolsky indicated that the working group had a separate concurring opinion which I rendered, it may raise the question as to what that was all about. Let me explain and let me propose that that separate concurring opinion should be appended to Dr. Podolsky's paper in the proceedings. I think it is useful. It is something that I think people should read and I'll tell you why.

First of all, since it will be a while before you will see that in the proceedings, let me say unequivocally that I wholeheartedly, without any reservation whatsoever, supported the recommendations of the working group as a constructive step forward to improve the present structure of ANSI in its handling of international standardization matters.

For that reason, I, as I say without reservation, supported the working group. I did say, however, and the reason I wrote a separate opinion was, I called attention to some concerns, some if's, that if certain things do not happen, then this very well thought-out plan may not work. And therefore I urge that whatever those if's are, people give serious concern to them, and try to resolve them.

If they are resolved, then I think we have a good possibility that this proposal, if it's bought by the ANSI board, of course, could be made to work and be a very constructive input to our country's handling of international standardization matters.

Thank you.

Now I'm back in service as your assistant.

MODERATOR SIMPSON: Over here and then down in front next.

MR. SHORT: Walter Short. Leon, you say you want comments from industry by the Board of Governors meeting which means that this is less than two months away. How are you going to get the information out to all those interested parties so that they can comment in that length of time?

DR. PODOLSKY: Walter, your question is very perceptive. We need your input long before the Board meeting. We propose to have a meeting of the working group in early November. We hope that all the people here, and this very august body here probably contains as broad a spectrum and as able a group of observers and commentators that we are likely to find in the country, would take it upon themselves to send us constructive comments and criticisms of what they've heard today or if they will promptly request from ANSI a copy of the working group's report, and then send to ANSI, to Dan Smith at ANSI, their comments and suggestions.

We would like to have these, frankly, by early November. The working group wants to meet early in November. There is going to be a meeting of the International Standards Council, the present International Standards Council of ANSI, in mid-November, and at that meeting we intend to discuss in detail your recommendations, your suggestions and this entire proposal, and hopefully recast it to have it in form to submit to the ANSI board of directors which is only a few weeks later.

Our time scale is short. We would very much like to have this before the ANSI board at its December 4th meeting. I urge everybody to move promptly.

MODERATOR SIMPSON: Comment down front?

MR. LEVIN: I'm Peter Levin, P. Nathan Incorporated (phonetic). I would like to compliment the working group, particularly on this development of purpose and structure, achieving a centrality which just plain doesn't exist today. And, secondly, with respect to the matters of authority and with respect to visibility on the international scene, again, something we don't have today.

I think, however, and this is the nature of the question that I would pose to Dr. Podolsky, there is a need which, in the general area, no matter what the glacial speed of the process by which standardization normally occurs or for that matter the development of certification systems, in light of whatever slowness occurs the process never seems, however, to achieve the kind of timeliness that one would desire. And there are several layers interposed between, let us say, the working level and the level of authority, that might preclude timely achievement.

I suspect that this probably lies in the development of procedures rather than in the creation of an organizational chart. And my question is, is the working group looking as well at the procedural matter which would indeed provide some time concepts in terms of dealing with problems that nevertheless become real eventually and that require resolution.

Secondly, it strikes me that the real problem can be and might be a question of fuddy-duddiness upstairs in any of these matters and how then does a concept move upward to gain, if you will, the national consensus that at least permits it to be argued through?

DR. PODOLSKY: If I may, Peter, the full report of the working group, which I could not include here today for reasons of time, does deal to some degree with this time factor, in outlining some of the things which this International Standards Council must do.

The working rules of this new proposed International Standards Council would indeed be aimed directly at the time factor problem which you

outlined and which is a very real problem and it is one of the very real reasons for the recasting of the International Standards Council, is to bring these time factors into the field of practicality and reality, which you and I both know are necessary now internationally.

The second one, on the dealing with fuddy-duddyness, I can't really deal with this specifically except to say that in my experience there are always ostriches who stick their heads in the sand and who are overtaken by the first sand storm that comes along. There are, and we expected, and must fully expect, there will be some such in opposition to this type of proposal, this type of activity, because it is totally new, it is totally radical, it's a departure from what we have done before.

I hope that those people, whoever they may be, can be made to see the tremendous need, the fact that this is a practical solution kept within the private sector, and that for the first time it really would bring about a friendly, cooperative and constructive relationship between the federal government and the private sector.

And I hope that when they realize that, the fuddy-duddyness will disappear.

MODERATOR SIMPSON: Questions or comments?

Over here. Down in front.

MR. MUNGER: My name is Munger. I'm with the Air Conditioning and Refrigeration Institute.

Leon, you mentioned that there was a review of the financial needs of ANSI to implement this International Standards Council concept and I wondered whether any thought had been given to how those funds might be raised, or is that outside the scope of your working group?

DR. PODOLSKY: No, not at all, Don. The working group. And you'll find in the working group's report a considerable discussion of that subject.

First of all, ANSI today is in a healthy financial situation. ANSI today, to carry out the programs which it traditionally has carried out, which it is carrying out right now, probably is adequately funded for the international standards work.

It is the new responsibilities, as I mentioned in my paper, it is the new responsibilities with regard to the GATT codes, with regard to implementing A-119, with regard particularly to implementing some of the obligations which will impinge on the private sector as a result of Title IV of the Trade Act of 1979, which need to be addressed and which have been addressed by the working

group in its studies and in its report.

Some of the funding for this clearly should be supported by the federal government because the obligations which are imposed on ANSI will be imposed on this new International Standards Council, are strictly dictates of law. They are legal requirements in the Trade Act. And some of these things should not be imposed as cost burdens on the private sector standardization effort.

So it is for this type of activity that the International Standards Council proposes that it be authorized to develop and make contracts, so that all ANSI will be authorized to make contracts with the federal government to support those activities which clearly are responsibilities of federal government imposed on the private sector which the federal government should pay for.

Now that, in our view, will never be a large part of the cost of international standardization activity. The largest part will always be borne by the private sector because it is private sector activity. But some portion of it is clearly a responsibility of federal government and ought to be paid for by the federal government.

MODERATOR SIMPSON: Yes, down here, and then we'll go down front. Mr. Barton and then Dr. LaQue.

MR. BARTON: I'm Derek Barton of U.L. With regard to figure 2, could you give us a little more detail on the interaction between the individual organizations' standards development committees and how that output gets massaged and results in recommendations that pertain to international standards and presumably impacts on domestic standards?

DR. PODOLSKY: Derek, not all the rules for operation of this International Standards Council have been written or considered. As a matter of fact none of the rules have been written.

What was attempted here was the design of a functional structure, not in detail yet as an operating structure.

Essentially, what is intended in both figures 2 and 3, is that the present organizational bodies in the United States that currently are standards writing bodies -- the professional societies, the trade associations, U.L, any other body that presently writes standards -- will maintain that function. And those standards, insofar as they relate to international standards activity, would be fed to a national standardizations sector coordinating committee, which would be a committee not very different from the standards board of ANSI at the present time, which is responsible for a particular sector of industrial or public interest.

There they would obtain the input from both the industry sector and from anybody else in the country who has an interest in international standardization. And they would, then, pass the standards up to the national and international standardization sector coordinating committees for action in the IEC, ISO, or any other international body in which the United States participates.

The structure, the operating structure, as far as the standards writing bodies are concerned, is not intended to be very different from the way it is today.

The primary responsibility rests with the standards writing organizations as they are.

MODERATOR SIMPSON: Question down in front, Dr. LaQue?

DR. LAQUE: Frank LAQUE. I saw Tom Hannikan (phonetic) here earlier today and I thought he might raise the point, but I will in his absence.

I notice that in your list of constituencies that ought to be represented, you didn't include Labor. Was this an oversight or deliberate?

DR. PODOLSKY: I can't say that it was either an oversight or deliberate, Frank. It was intended that these were illustrative bodies. We did not argue and do not argue that this is all-inclusive. I say any sector of national interest which should provide input and has interest in international standardization should be represented.

MODERATOR SIMPSON: Other comments or questions? We'll go back up here and then down in front again.

MR. BREDEN: Les Breden from HUD. It's been stated that you are spending about \$4 million now on international activities. I assume that this is split up between ISO and IEC. I'm wondering, what is the increase you anticipate? Is it going to double or triple? And I guess the second part of the question is: Roughly how many committees or what percentage of committees does ANSI have in ISO committees now?

Does ANSI have representatives? In other words, is it 50 percent of the ISO committees? I think there are about 159 committees now. What percentage of those are represented by ANSI or some representation by ANSI?

DR. PODOLSKY: Mr. Moderator, I would call on Don Peyton to answer for ISO committees. I will answer for IEC committees.

MODERATOR SIMPSON: Why would you answer for IEC committees? I thought they were all part of the same organization.

DR. PODOLSKY: We are, but I know the accurate numbers -- I'm not as personally, intimately, associated with the ISO activity as I have been for a great many years with the IEC activity, and I happen to know the exact numbers. Bear in mind, I just finished on the first of July a term as president of the U.S. National Committee of the IEC and I can tell you that there are 214 IEC technical committees. The United States presently participates in 186 of those committees and subcommittees. We have 186 technical advisors and 186 technical advisory groups for those committees in which the United States participates.

Now, perhaps Don Peyton can give you the numbers for ISO.

MODERATOR SIMPSON: Mr. Peyton, would you be willing to give us the numbers for ISO?

MR. PEYTON: I'll give you a percentage. I haven't got my book with me. We are key members of about 90 percent of all the ISO TCSC's and working groups. And frankly we can be a key member of 100 percent.

There's only one thing we need. That is a viable technical advisory group that wants to participate. And any time we get one, we join up the next day. It's just a matter of sending a telex.

Les, your number is a little wrong. I think I said we spent \$1.5 million out of ANSI's budget. Now, if that's true, we probably spent about \$15 million from other sources. We're only the tip of the iceberg. But about 90 percent is the figure right now, of team membership as contrasted to the totals of -- there are 1,700, is that right Ralph? 1,700, I think it is, of TC's, SC's, and working groups, in ISO.

MODERATOR SIMPSON: Okay.

DR. PODOLSKY: Mr. Moderator, I might add a number that might be significant to the questioner. The voluntary participation of the electrical, electronics industry in, in the IEC activities, cost industry approximately \$20 million a year. There are 4,000 members of the 186 technical advisory groups. And when you count the cost of their participation, both in the technical advisory group meetings in the United States and the time to prepare the United States' positions and the cost of delegate travel to the IEC technical committee meetings around the world, and to the general meetings, it adds up for the electrical and electronic industry, to approximately \$20 million per year.

MODERATOR SIMPSON: Question up there? Yes.

MR. THORNTON: Doug Thornton, Ross Operating Value, in Detroit. First, I'd like to say that we strongly support a voluntary standards system,

without any government control and without any government financial assistance.

After reading through the OMB circular, as well as going through the national standards policy, and looking at the impact that that would have on ANSI, it was our recommendation and, in some of the comments that we made to ANSI, that industry come back and support ANSI financially, if required, and we as a company would share in that in terms of supporting ANSI to maintain these voluntary standards organizations.

Now, I'd like to direct a question. In that we are a small company and you bring up the question of small companies, I have a hard time rationalizing what is small and what is big. But as a company, we are doing business internationally with operations in Europe as well as Japan. We do produce to the DIN standards, the CENOMO standard, to the IEC, to the ISO, and to the JIS, and to ANSI standards. That is, where applicable.

We do have a definite interest in the ISO activities. How do you propose to monitor effectively that the ISO delegations that are presenting a U.S. position for negotiation truly represent a U.S. industry position and not the position of any one standards writing group and/or one company domination of a standards writing group?

MODERATOR SIMPSON: Dr. Podolsky?

DR. PODOLSKY: Obviously, the only way that that can be done is that this new International Standards Council has it as a responsibility and it is clearly defined. I read it out as one of its responsibilities, to see that there are viable technical advisory groups that do, in fact, represent all national interests and in which everybody who has an interest is given a fair opportunity to participate and provide his input. That positively is a necessary function of such an International Standards Council.

Now, let me point out to you that the U.S. National Committee of the IEC has performed this way for a great many years, now 75 years. This function needs to be expanded, needs to be broadened. It needs to be extended, possibly, to include more people, and it needs to be extended to include more of the ISO groups.

But I believe that only by having the system of a responsible chairman, a "technical advisory " if you will, and a technical advisory group which is truly representative of everybody in the country who has an interest in that particular subject matter and who is given an opportunity to participate and to see to it that everybody in fact is given an opportunity to participate, is the only way that you can fairly develop U.S. positions on any international standards matter.

MR. THORNTON: I think that that sounds correct but the question was:

How are you going to see that that takes place? Under today's system and under today's method of auditing this, it's rather difficult to have that accomplished.

Secondly, in looking at your chart number 3, it would appear that in order to participate in the standards writing, that one must be a member in a standards writing group. Now, does this imply that membership is compulsory in order to participate in standards writing? If so, I think that this would be a problem in terms of the interpretation of the national policy on standards.

DR. PODOLSKY: I don't see how it's possible, frankly, for anybody, as a sole individual or sole organization way out in left field, to participate in the development of the United States input to an international standard.

I believe that there are well-established standards writing groups in professional societies, in trade associations, in many organizations, which are open to voluntary participation by people who are not members.

I know, myself, a number of professional societies and a number of trade associations in which non-members are welcome to participate and provide input.

I don't see how a single individual or a single organization, as I say, out in left field, can expect to simply send a position to the U.S. National Committee of the IEC or to the U.S. National Committee of the ISO, if such existed, or to the International Standards Council, and expect to have its input considered along with a carefully studied, well-developed position, developed perhaps by a whole industry or by a whole profession.

I think that you have to participate in a technical advisory group on that subject matter in order to have your ideas properly discussed, debated, considered, and included in a national position which represents everybody in the country that has any interest.

I don't think a sole individual can make his voice heard or even should have his voice heard about that of a nationally structured advisory group in which he is free to participate.

MODERATOR SIMPSON: Further questions? Bill McAdams. While you're coming up, I'd like Leon to think about whether or not -- by the way, the Moderator reserves the right to also ask questions. It's just a new rule that I just invented. One of them is, think about it, well, we'll let Bill, and then I'll see if there is someone else.

MR. McADAMS: I'd like to raise an old question, one which we attempted to solve several years ago and didn't really succeed. In your proposal, you don't say very much about a U.S. committee for ISO as compared to

the U.S. committee for IEC. In my presentation this morning I pointed out that Canada has a U.S. committee for ISO which seems to be working quite well and I might ask Ralph Hennessey later if he would like to comment on that.

But at the present time, we don't have a U.S. committee for ISO. There are a lot of activities going on at the council level, particularly, that are involving many branches of industry and the private sector in the United States. There is a major committee in ISO that is dedicated to establishing procedures for the development of standards and for the referencing of standards by government and other people. There is another major committee in ISO on certification which is involved in all aspects of it, in fact it is developing a major manual on this subject.

There is another committee on consumer protection which has a long list of programs which certainly need the attention of very many groups in the United States. There is another council committee of ISO on aid to developing countries or assistance to developing countries and participation in international work. There is another one on information systems and data networks and that sort of thing, ISONET being the key word in that sort of thing.

I'm wondering if your committee gave any consideration to recommending, again, that the U.S. through ANSI create a new committee, a U.S. national committee on ISO?

DR. PODOLSKY: Bill, it was discussed, and it was left. No specific recommendation was developed on this point because it was left to the new International Standards Council as we have proposed it to develop the structure and form of its committees and bodies. And it is fully intended, we intended, that the International Standards Council give consideration to that very question to determine. It certainly had no intention of disturbing the U.S. National Committee of the IEC. It works too well now. It does intend that the U.S. National Committee of the IEC be actually broadened and strengthened in its operations.

Perhaps a U.S. national committee for the ISO is, in fact, necessary, but it was left to this new International Standards Council to determine that question.

MR. McADAMS: Could I make another comment?

MODERATOR SIMPSON: You may, please.

MR. McADAMS: I also mentioned this morning that the executive committees of the Canadian National Committee for ISO and the Canadian National Committee for IEC formed a joint committee which I believe turned out to be of some help to the Standards Council of Canada. They had a chance to develop

major policy questions that involved both organizations and it seems to me that your overall proposal relates to that in considerable detail and I would like to know whether you consider that a good idea?

DR. PODOLSKY: Bill, this International Standards Council, as described, is essentially that body. It is the coordinating body for the ISO and IEC activity and for any other international standards organization in which the United States should and must participate. It definitely is the coordinating body. It is precisely the equivalent of that body in Canada.

MODERATOR SIMPSON: Any other questions, comments?

Let me just propose one to Leon. It seems like an awfully polite audience out here. I have a question that I'd ask, probably, if I were in the audience.

You proposed a new structure so I assume that you're addressing something that, if it ain't broke, it might at least be fractured. You're proposing something new.

If you're proposing something new, I assume that you're reacting to at least a lack of consensus that what is presently in place is adequate. If you're reacting to a consensus that what is presently in place has some inadequacies, and by what reasoning, or do you have any reason to believe that anything proposed from within ANSI could have any greater consensus than what presently exists?

DR. PODOLSKY: Dick, I will repeat here, in answer to your question, the first of the principal findings of the working group, and I said the working group found that the present structure and support of ANSI, for international standardization are not adequate.

In view of its increasing responsibilities, and the required close working relationship to the federal government to implement Title IV of the Trade Act of 1979, the GATT Code, and the OMB Circular A-119, we are proposing a new structure because the present voluntary standards system structure that exists in ANSI is not adequate to interface with the federal government to do the things that will be expected of the private sector.

It is not organized or structured to provide the kind of input to government under the GATT Code or even to support the Department of Commerce's responsibilities under Title IV of the Trade Act of 1979.

The purpose of recommending a new structure is to make it possible for the private sector to provide adequate and proper input to that.

In addition, we do know, and we have said so, I said so in my report,

there are tremendous new pressures for expanded standardization work internationally. That expanded work is necessary to support our international trade and even to defend the international trade we now have.

We are also being pressured to provide standardization effort and support for the developing countries. We are not properly structured in the United States to do that at the present time.

Functions of this new International Standards Council are specifically intended to meet those needs and those responsibilities.

MODERATOR SIMPSON: Do you have reason to believe that it will have a consensus support?

DR. PODOLSKY: Yes, I do. Perhaps I'm a perennial optimist, but I've been an optimist for a long time. I'm stubborn. I won't give up when a very, very competent, six-man, three-government, three-private sector working group of very competent people, have studied for a year and have come up with a set of recommendations which make such good common sense. I surely won't give up for a lack of optimism that the ruling bodies in the standards writing organizations, that the boards of directors of professional societies, of trade associations, and the ANSI board of directors, will not see the needs which have been outlined and the recommendations for meeting those needs.

MODERATOR SIMPSON: We have a comment in the back and then one in the front.

MR. ROGERS: Lee Rogers, Department of the Navy.

I've heard several speakers and now most recently you, sir.

DR. PODOLSKY: Could you speak a little louder? I can't hear you.

MR. ROGERS: I'm sorry. I very rarely have that complaint.

I've heard several speakers today -- I'm Lee Rogers with the Department of the Navy -- mention the fact that the private sector is covering most of the costs of domestic and international Standardization. My question is, over the past several years, I know my own organization and most of the peers within the Department of Defense and other government agencies, are paying their membership dues, their administrative fees, buying standards and so on from ANSI, ASHRAE, UL, NEMA, NFPA, and most of all ASTM, paying quite heavily towards both domestic, the cost of domestic standardization and international standardization, with people participating, traveling, and so on.

Yet, regularly I hear you and the other speakers talking about the

lack of funding from the federal government. I'd like to have your comment on that, if I could.

DR. PODOLSKY: I cannot comment on the totality of funding by all agencies of the federal government. I can comment on those agencies that I do know. The fact that any agency of government buys standards from any standards writing organization or buys standards from ANSI is not a very big contribution to the cost of international standardization. As I pointed out, the electrical and electronics industry spends \$20 million a year in their participation in the IEC. The buying of the standards that come out of the IEC by government agencies is a very miniscule part of offsetting that cost.

What is not done, and no federal agency contributes one penny to the overhead of operating ANSI or to the overhead of paying out dues in the ISO or the IEC or in the staff support to carry out those functions. Yes, there are very competent technical people from various agencies of government, from various departments of government, who do appear in technical advisory groups and who do go as United States delegates to international meetings. I know quite a number of very highly competent people who go to the IEC technical committee meetings.

But I assure you, sir, that their cost, and their financial input, is a very miniscule part of the total cost of operating the voluntary standards system of the United States.

MODERATOR SIMPSON: We have another gentleman back there.

MR. McNAMARA: Tom McNamara from Honeywell, again. I had a question vis-a-vis your comment about the fact that the present structure seems to be completely inadequate to address the, what seem to be the rather significant new requirements on the part of the United States imposed by the Trade Act of 1979. I was wondering if it would help in your proposal if you could be illustrative of some of the areas wherein these, where these new responsibilities are and what is it about the current structure which precludes their being able to be taking care of it in the present structure?

DR. PODOLSKY: Tom, I don't have before me the list of all of the functions. The Trade Act of 1979 dictates the Department of Commerce shall make an evaluation, for example, of the adequacy of U.S. participation in international standards work in specific areas.

It dictates a study by the Department of Commerce of the adequacy of certain international standards work. These are just two illustrative examples, there are many more. I would prefer to give you a study which I have already made and I have analyzed, Title IV, the Trade Act of 1979, as to the specific functions which are dictated that the Department of Commerce perform.

I have pointed out those functions which the Department of Commerce cannot perform because the totality of expertise and the totality of input must come from the private sector. Now, somebody has to pay for that performance.

For example, if the Secretary of Commerce dictates to the Office of Standards a study of the adequacy of U.S. participation in a certain international standards area, where would the information come from? The information could only come from industry, from an affected industry. It could only come from the elements in the sector who are affected by it. There would have to be a committee structure somewhere. There has to be a fair and open-minded system of study of whether this is, in fact, important. Is it, in fact, adequate? Is it being supported? Who's doing it? How is it being done?

Now, that can't be done in government. It's got to be done by private sector people whose business is affected by the international standards that are there.

It's the kind of function that needs to be performed. Now, somebody is going to perform it, somebody has to pay for it. The expertise to make that kind of judgement doesn't exist in government. It exists in the private sector. And somewhere in the private sector, the experts have got to be found and paid to do it.

That is one very simple example. There are other much more serious ones. I would prefer to give you, Tom, if you will drop me a note and remind me, I will give you a listing of the functions in Title IV that need to be performed, that are dictated to the Department of Commerce, that the Department of Commerce has to go to the private sector to get and will have to pay for.

MODERATOR SIMPSON: We will take one last comment or question. Mr. Peyton?

MR. PEYTON: I just have one small comment for the gentleman from the Department of the Navy. If anybody in the Department of Defense is giving ANSI any money, I'd sure like to know where it is coming from. I know they support the other organizations and they should. They'd better because they need to develop standards. But ANSI's costs, I'm talking particularly about international, are substantial. We buy the ticket to the ball game.

Dues alone run \$800,00 a year for two organizations. And our total input from the Department of Defense on service fees, dues, memberships, administrative fees, or anything else, is zero.

They do buy an occasional publication but even there, remember ANSI doesn't benefit from those things. We have a lot of garbage in; garbage out.

But we have to buy the standards and resell them. We're not a publisher of prime resort. So good luck. I'm pleased and I wish you'd go to DMS -- what is that, Defense Materials Standardization or something office -- and help me convince them that they ought to be involved in the participation of our financial affairs. Thank you.

MODERATOR SIMPSON: I think that's generally true. Thank you. You might hear speakers contentiously say that if you take administrative overhead costs of standardization, such as ANSI's cost, that the total cost is at least 10 times that. It's the total cost. The principal burden, I suppose, is travel and salary or in lieu of salary for the individuals who actually go. But there are generally an awful lot of people who fail to note that there is a real cost, that is, the tickets to the ball game, etcetera. I've served on corporate staffs and it's almost like the divisions are afraid to support the corporate staff but those of us who are there know that we are really important. That's the corporate staff. You've got to pay the fee to get that policy direction, even if you don't want it.

We're going to go on now. Thank you, Leon.

Our next speaker is Dr. LaQue, Frank LaQue. His talk is Optional Mechanisms for Dealing with International Standardization Requirements by the U.S.A. I might just mention this as Frank is on the way: I had the pleasure of being with him in Ankara, Turkey, on the occasion of when he was sworn in or indoctrinated as the president of ISO and he gave one of the most courageous and outstanding acceptance speeches I've ever heard and I hope you don't do that again today, Frank.

DR. LAQUE: Well, almost. Just to enlighten you about the incident that Dick has mentioned, it turned out that my formal election as president of ISO occurred just before lunch. It had been customary for the incoming president to make a speech. That would have required that they reconvene after lunch to hear my speech. So I solved the problem by noting that I had prepared an excellent speech, available to anyone who wanted a copy, at ISO headquarters. I appreciated the honor but in lieu of presenting the speech I would prefer that they get it by correspondence. Now, this is not quite the same with my present speech, although it is rather extensive in its eventual printed form, much more extensive than you would tolerate hearing or benefit from in that much detail. Consequently, all I am going to do this afternoon is present some excerpts from what eventually will appear in the record of the conference. I have assumed that there will be a product of this conference and that this product will make use of the data base that is coming into the conference. What I have prepared is largely a contribution to the data base.

OPTIONAL MECHANISMS FOR DEALING WITH INTERNATIONAL STANDARDIZATION REQUIREMENTS
OF U.S.A.

Presentation by: FRANK L. LaQUE

DR. LaQUE: In response to my assignment to examine possible alternatives to the restructuring of the ANSI council that Dr. Podolsky has just described, I went over my experiences during the past 20 years with several approaches that have been brought forward during that period. These include roughly, in chronological order:

In 1965, our report on engineering and commodity standards, which by the way resulted in the creation of ANSI as a successor to the American Standards Association;

The Bill, H.R. 7506, which we referred to previously, that Mr. Simpson drafted and which I had to nurse through the Congress in 1973; possibly the Standards Council of the U.S.A. which never got beyond the conceptual stage; Senate Bill S. 3555, which I opposed; and Senate Bill S. 3555 and S. 825 I also opposed; the 1977 ANSI report on implementation of the GATT code;

In 1978, the National Standards Policy Advisory Committee report and the responses to this being prepared by ANSI and already prepared by ASTM; the concept of an American International Standards Institute, which never got very far; the OMB circular, A-119; the Trade Agreements Act of 1979; the proposed Federal Trade Commission rule which I also opposed in a hearing; and the proposal just presented by Dr. Podolsky.

You will find in my formal paper a great many details concerning the pros and cons, if you like, of all of these possible approaches.

I had decided, not having heard that Mr. McAdams was going to deal particularly with the Standards Council of Canada, to devote a great deal of attention to this possibility, as a possible pattern for something like it in the United States. I will present some of this here because there are some aspects of that this are pertinent that weren't covered in particular by Mr. McAdams.

Of course, implicit in all of this is the possibility of not doing anything, leaving well enough alone, as suggested by John Rankine. In the continuing study which I hope will stem from this conference, the criteria which I am proposing for appraising various approaches can be applied to the present ANSI set up along with the other alternatives. I assume that this will be done in any further study that may occur.

Going beyond the structure of any institutional arrangements is the necessary consideration of a climate in which the necessary collaboration

between the government and the private sector will be undertaken. I have given particular attention to the history of relations between ANSI and the government.

At the extreme, this has approached an adversary relationship with the Department of Commerce, in contrast to the relationship involving the level of cooperation that I think must exist in the future.

In this context, I found it to be difficult in my review to establish that the positions taken by ANSI from time to time were the result of specific positions taken by the ANSI Board of Directors, as distinct from what appeared to be impromptu responses by an ANSI spokesman.

I must say that I also think I have detected an underlying and probably continuing and perhaps well-founded fear on the part of ANSI, that greater involvement of the government in its affairs, and particularly concomitant with greater levels of financial support must eventually lead then to government domination and control.

I'm impressed by the caliber of the people in the recently published list of nominees to the ANSI Board. I'm not suggesting that previous boards were of inferior caliber. I am only expressing confidence that the next board and others in the future will take a more dominant role in defining and proclaiming the position of ANSI on matters involving the relations with the government.

I shall now present the criteria for appraisal, which I have mentioned, and deal particularly with the concept of a standards council of the U.S.A. This should not be interpreted as representing my conclusion, that a standards council of the U.S.A. is necessarily the best structure that we could have. I merely think that some of the aspects of it and its performance in Canada could be useful for consideration by any future study involving the possibility of recognizing desirable features that could be incorporated in any other structure.

I have set down certain criteria for appraisal of the various alternatives. These represent my own judgment and need not necessarily be used by anyone else in making other appraisals.

The first criterion, the organization must be able to deal with national as well as international standardization, since it will have to make use of the same people in intertwined activities.

Number two, it should be able to accredit sources of standards qualified to become U.S. national standards and to help in combining these private sector standards with standards issued by government agencies to form a complete body of U.S.A. standards identifiable as such for the benefit of anyone in the world who needs this information along with guidance to sources of these standards.

Number three, an ability to represent U.S.A. interests in treaty as well as non-treaty international standardization activities. I didn't say organizations. I said activities.

Fourth, a readily identifiable presence of the government in representation of the U.S.A. in international standardization administrative and technical activities. This is in line with the role of standards and related testing and certification activities as instruments of U.S.A. and other governments' commercial policy.

Fifth, provision for financial as well as technical support by the government of both the administrative and technical aspects of representation of the U.S.A. in international standardization programs.

Sixth, appropriate means of dealing with concerns and perhaps administrative activities of state and local regulatory bodies, using standards for reference in codes and other regulations, as these may be affected for example, by implementation of the GATT Code.

Number seven, a policy for operations that would minimize and, preferably, exclude more than temporary direct involvement of the organization in the development of standards in competition with standards organizations in the private sector able and willing to satisfy a national need. There must be no invasion of revenue of these organizations from sales of their standards.

Number eight, details of organization and operation compatible with the rules and procedures of the International Organization for Standardization and the International Electrotechnical Commission.

Ninth, expressed confidence in the organization on the part of the government and of standards organizations in the private sector whose combined efforts must be administered and coordinated properly in order to do what has to be done.

And tenth, which perhaps shouldn't be identified as a criterion, rather as something I think is desirable, existence as a quasi-governmental or quasi-public entity with a federal charter so as to ensure ready visibility of a government presence and continuity of financial and technical support as required by criteria four and five.

Now I will trace the history of the concept of a Standards Council of the U.S.A. patterned after the Standards Council of Canada. The reason I have put this in some detail in my paper is that it doesn't exist elsewhere and it should be referred to by the further study which I hope will be undertaken.

When I was in the Office of Product Standards in 1974, it appeared to me that it would be a timely thing to update the 1965 CTAB report and I proceeded to make arrangements to do this. In the course of planning such a study, I became a consultant to Ambassador Dent who was then head of the Office of Special Trade Negotiations and in charge of U.S.A. participation in negotiations which have since led to the GATT standards code.

At that time, Ambassador Dent was inclined to resurrect the legislation that had gotten nowhere. I talked him out of that and suggested that rather than to go ahead on such a line he should wait for the report of this new study which I was attempting to organize.

The matter got to the point that the Department of Commerce had drafted an announcement of the proposed study to appear in the Federal Register. The mission of the study was to be how the proposed GATT standards code should be implemented in the United States and how it should be utilized to promote U.S. trade and commerce and other U.S. public interests.

The organization of the committee had extended to the point that I had chosen the 15 or so members. They were in the process of being cleared. A young man in the Commerce Department had been appointed to be secretary of the study. I was supposed to be chairman of the study committee.

In the middle of all these organizational activities, early in 1976, I found out, not directly, but by telephone call from the fellow who was serving as secretary of the study, that it had been called off. No one up to now has told me directly that it was called off but it was evident that it was called off. What had happened, apparently, was that ANSI had persuaded the trade agreements people and Commerce not to proceed with the study for the same purpose but with a narrower scope than I had viewed as being an updating of the overall 1965 report.

I became involved as a consultant to ANSI in their study which was done under contract from the Department of Commerce.

Now, with regard to the study and, particularly, the standards council of the U.S.A. possibility, I structured the proposed study in terms of about 20 questions that needed to be examined. These are appended in an appendix to this paper.

I also visualized what a standards council of the U.S.A. might look like and that also is appended to this paper.

Now I have applied my criteria to what I visualize as the standards council of the U.S.A. and have found that it met all of these criteria with the following possible exception. It had said nothing about how to deal with treaty as well as non-treaty standardization activities.

In order to explore this, I went during the summer up to Canada and saw my friend Ralph Hennessey, primarily to discover how the Standards Council of Canada had been working out and his answer to some questions related to the criteria that I had mentioned.

I was informed that the Standards Council of Canada Act, a copy of this is appended to my paper, is silent on this point. However, the Standards Council of Canada is given an opportunity to advise the Department of Industry, Trade and Commerce on matters involving standards, certification, and testing, as related, for example, to the GATT code and to Canada's participation in the United Nations Economic Commission for Europe.

With regard to criterion item six, concerning state and local regulatory bodies, presumably this could be handled in the composition of the governing board of the council. As noted earlier today, members of the Standards Council of Canada include six members from government agencies or departments and one member from each of the 10 Canadian provinces plus 41 others selected at large.

It certainly would be impractical for the United States council to have a member from every of the 50 states. But other means presumably could be found to deal with matters of state and local interests.

I covered other points which I will not discuss in great detail but I will pick out a few of them.

The Standards Council of Canada does not, as a matter of form, recognize as national standards of Canada, those issued by Canadian government agencies

In implementation of the GATT code, it will serve as the inquiry point re government as well as private sector standards.

In connection with standards used for procurement by government agencies, the National Standards System of Canada administered by the SCC includes as an accredited standards writing organization the Canadian General Standards Board. This is a new name for the former Canadian Government Specifications Board mentioned earlier. It is concerned with procurement by government agencies. This has become an amalgam of government and private sector personnel. Their standards, as used for procurement and voluntary consensus standards, are submitted to CSC for recognition as national standards of Canada for use in the private sector and for reference in provincial codes.

In the field of regulation, a number of private sector standards are referenced in federal legislation. Currently such referencing does not require that referenced standards have been recognized by SCC as national standards of Canada. Action by the government to recognize such qualification

as a matter of principle, if not as a specific requirement, would have the same effect.

Apparently, the Standards Council of Canada has not encountered any serious problems in carrying out its mission. In the early stages there was some strain in working out proper working relationships with the totally private sector Canadian Standards Association, CSA. The latter was, to say the least, something less than enthusiastic about the establishment of a Standards Council of Canada.

A similar situation might be expected to develop vis-a-vis any such proposal in ANSI.

By action of its board, the Canadian Standards Association is committed to submission of its standards to SCC for recognition as national standards of Canada. There is no legal requirement for such submission.

In connection with international standardization, Mr. McAdams has described that in sufficient detail and I won't go into it any further at this time, although it is in my paper.

No problem arose re acceptance of the Standards Council of Canada as a member by ISO and IEC as a replacement for the Canadian Standards Association, which had held the membership.

The Standards Council of Canada had an income of \$4,205,859 in the year ended March 31, 1980. Of this, 88 percent came from the Canadian Ministry of Industry, Trade and Commerce. There are 35 persons on the senior staff of the Standards Council of Canada.

Just to be sure that I hadn't missed something, as an extension of my discussion with Mr. Hennessey of how the Standards Council of Canada had been working from his point of view, I solicited comments from outside the Standards Council of Canada to discover if there were any problems with its operations that had not been brought to my attention.

From this exploration, I reached the conclusion that things were going very well and even better than might have been expected from the doubts that were expressed when the Standards Council of Canada was being created by the government of Canada.

It was stated, in particular relation to the topic of the present conference, that the Standards Council of Canada as the member for Canada in ISO and IEC had been able to achieve a higher focus. This language was used by the source of the comment. This was primarily the result of the greater input made possible by greater funding and much more staff support than had been available to the previous representative from the private sector. The

latter also benefitted greatly by way of relief from the cost of dues for membership in both ISO and IEC.

It was suggested from these sources outside the Standards Council of Canada that if a standards council of the U.S.A. were to be established it should run itself rather than be run by the government and with no political influence, that is, on the membership of the council. The source of the head of the operating staff should change from time to time between the private sector and the government.

Finally, and perhaps of greatest importance, the success of this arrangement in Canada was attributed primarily to compatibility among the people involved within the Standards Council of Canada and the standards writing bodies in their cooperative efforts in the national interest.

Then, back in the early days, when I was contemplating the possibility of a standards council of the U.S.A. being a result of action by the Congress, I got hold of the Canadian equivalent of the Congressional Record and read all the details of the debates in the Canadian parliament when the Standards Council of Canada was being considered. I have included in my paper a number of excerpts from these debates which I shall not repeat in total here. They are there for the record. I have a great many more in my personal files. If anyone wants more, I can provide them.

An important assertion during the debate was made on behalf of the Canadian Chamber of Commerce and I quote this, "that a standards council of Canada would duplicate the work of the Canadian Standards Association and would cause confusion." It was claimed also that the standards council of Canada "would become an expensive, expanding bureaucracy that was not needed."

I suspect that such a fear probably exists here if anyone is thinking about a standards council of the U.S.A. It may very well be well-founded. If there is any defect of this approach, I think that it seems to call for another layer on top of what we already have. I hope that some other arrangement that we have been discussing will take care of what's needed without that kind of action.

There were a number of comments made by the Minister, supporting the establishment of the council, in which he defined the essential characteristics of a national standards association as follows.

He said at first it should be representative of all the parties interested directly or indirectly in the adoption of standards.

Second, it should not only be impartial but also appear to be so.

Third, it should command the respect of all. It should be aware of national, domestic and international policies.

With regard to the Canadian Standards Association, he said that with all its other merits it did not meet these criteria. He stated further, "establishment of the council will extend the principle of consultation and participation to the level of policy formulation at the full national level so that interested parties may have a chance to be heard not only in standards writing but in planning the whole direction of standardization activities in the future."

He went on to say further, "from the point of view of prestige and continuity he believed that it is absolutely necessary for Canada to be represented by an agency created by the Parliament of Canada."

This is the opinion of a Canadian Minister. It's not necessarily mine.

With regard to objections raised by the CSA, the Minister stated, "the standards council will be made up of people intelligent enough not to abuse. So how can we deprive people of a power that is already used in the standards writing organizations? How can we deprive them of the capacity to look into these matters? CSA and the others will be there on the council. If they cannot defend the interests of intelligence, wisdom and what-not in this council, then they should be replaced by the very organization that has appointed them."

And finally, he said something in a philosophical way better than I would have or can. He made an especially cogent statement. "The government in any broad field such as standardization which reaches far into the lives of many people has a responsibility not to control the field but to ensure that the public interest is protected."

Finally, I am applying my criteria to the proposal just described to you by Dr. Podolsky.

It seems to meet all the criteria except number six, dealing with concerns of state and local government, perhaps that can be dealt with in the constituencies that he wants to have represented. Re criterion number nine, I think you would need to have confirmation in advance or some commitment in advance that the standards organizations that will make it work are willing to play ball under the rules that he proposes be established.

And criterion ten, it doesn't provide explicitly for the existence of a recognizable government presence to the extent that I think would be desirable.

I think it would be in order, if Dr. Podolsky is agreed, that in a supplement to his paper he put into the record for use by any future study group the more detailed description of what he has described in principle so they would have that to take into account in their further study. Whether that's practical or not, I don't know, but I hope so.

Finally, I hope that as Dr. Baruch said, that there will be a product of this conference in the form of some way of making use of the several inputs to it. I suggest that this study should be organized and undertaken in the private sector with appropriate participation by representatives of federal and local government agencies. I even hope that Dick Simpson can be persuaded somehow to serve as chairman of the new study. I suggest that candidates for the study group be drawn from the contributors to the present conference and from those who will submit supplementary statements plus members of the national policy advisory committee who suggested that this continuing study be made and that they become, some of them at least, candidates for the new group.

Thank you.

(Applause.)

MODERATOR SIMPSON: I'll first ask if Dr. Podolsky would like to react to the suggestion?

DR. PODOLSKY: Yes, I would. I have three points to make with regard to Dr. LaQue's presentation.

First, I'd like to point out that as he spoke I applied his ten criteria to the recommendations which my working group has proposed. We meet every one of his ten criteria and I'm perfectly willing to sit down with him and prove it. He hasn't named one single point in his ten criteria that we did not take into account, which are not met.

Secondly, I would like to point out, if you will remember the diamond pattern of my figure 2, which on the right side had an international standards council and our suggestion to the working group considering the implementation of the national standards policy that there be a parallel national standards council, that in fact, if ANSI were structured that way, with an international standards council and a parallel national standards council, you would, in effect, have a standards council of the United States. You need go no further than that.

With regard to point six, that is the question of support of treaty activities. If you will simply read Appendix 1 to my paper, which is the ANSI international standards policy published in December of 1978, it very explicitly covers Dr. LaQue's point six and that is now the private sector, how ANSI specifically representing the private sector should support and implement the U.S. governmental activities in the treaty area. That has already been foreseen. It is already part of the present ANSI international standards policy.

Thank you.

MODERATOR SIMPSON: Questions or comments from the audience? Yes, down in front.

MR. ROSS: Steve Ross from Warren, Gorman, Lamont, which despite the name is a publishing company, not a law firm. Directed to both our speakers for this afternoon. The question is really a product of about ten years of continuing committee work in standardization at ATSM, mainly in an industry that is rather fragmented, monitoring of atmospheres. There are a lot of small companies in it.

I see this grand superstructure that ANSI or whatever it might be, maybe some government help, but the links of how you get input from the troops, the little companies and maybe some not so little, but those companies out in left field that are being bothered by non-tariff barriers. A lot of things that are written into ISO standards that are perhaps unduly restrictive, exact measurements, exact current requirements, things like that, that really are irrelevant, but they are technical. It takes someone to catch them and say, Hey, that disqualifies my instrument. I don't meet it, all right?

Aside from the fact that the streamlining at the top ought to help, ought to give us more time to get ISO documents down, maybe, to where they might be looked at by actual companies that are affected by them, is there any easy way that you've considered to really get some direct aid there? Perhaps I'm bothered by the ANSI saying, well, we don't really want participation from people out in left field. You got to be a company that spends a great deal of time in standardization work, otherwise we're not going to listen to you.

DR. LAQUE: My own experience with ANSI doesn't suggest that your statement is well-founded. I think there's no resistance whatsoever on the part of ANSI to receiving inputs from anybody by way of comments on proposed standards, as proposed for action, or any other contribution that you may wish to make. I think it was the same point that was brought up earlier today and I think the answer was that there are plenty of opportunities for even small companies to become involved in standardization activities so long as they are aware that they are going on.

I think there must be ways through the ANSI publications to find out what is going on.

MODERATOR SIMPSON: Is there a follow-up question to that?

MR. ROSS: Obviously a lot of companies are not taking advantage of a lot of the mechanisms that do exist either because they don't know that they are affected, they don't know they are affected by the ISO standard or by the IEC standard or what-have-you. And they are not taking part. They are not being triggered to taking part.

I know on occasion we've wanted to do mailings to companies and say: Here's the standard that's been proposed. How does it affect you? But we either don't have the time or the money. What can we do about that?

DR. LaQUE: I will defer to Mr. Petyon. He knows how ANSI works better than I do. Would you answer that question?

MODERATOR SIMPSON: Mr. Peyton, would you like to try to answer that question?

MR. PEYTON: I can't tell you about the money because I think we all suffer from that dirth but on timing I think we do have a problem which we have to get straightened out and we're trying at ISO council level.

Remember, we're in the international standards area. We're in the international standards area. We're playing in the rules of the ISO and the IEC. We don't set the time limits. We have to respond in X numbers of days on these types of requests.

In our own standards action type of publication we can extend time. We often do. Now, believe me, we've tried, but maybe not enough or not had enough alternatives and we would be happy to have suggestions on how to get smaller businesses into our act.

We even went into quite an extensive and quite expensive deal with the National Small Business Association to try and get these types of inputs, to feed them information. We even had a staff to help make interpretations so people could react.

And I'll tell you something. It's tough. A guy has got to feel the pinch before he'll respond. They don't respond. Now, I'm sorry. It's a fact of life. We would like to try other means. But moneywise, as a lot of my friends have said, perhaps this is -- there's no question about it -- an area where the Small Business Administration or the government in some form should begin to look very seriously into communication problems with small business.

Dick, you and I have talked about this for years. The timing, don't always blame the timing on ANSI because, again, we're stuck with the timing on what an ISO directive says we have to respond to something. And if we don't get the documents into ANSI headquarters, some times it's very, very difficult. We raise the roof all the time about that and we're continuing to work on it.

MODERATOR SIMPSON: I'll just add that the problem of communicating with those who might be affected by a publication, involving him in the process,

is not unique to the private sector. It's also a problem that the government faces, whether you are a regulator or anyone else. All I can say is, every organization I've talked to, government or private, recognizes an obligation to do something more for a small business than they do for a larger company who is presumably better able to take care of itself.

Now, that's always one of degree. It's difficult to do. And it's expensive. It may be one of those areas, if there were some funds available, to assist in that maybe someone could create some lines of communication and it might get better. But it's probably never going to be satisfactory. It may be one of those areas which is a candidate for some public participation.

If the federal government is to be consistent and have a Small Business Administration and if what I read about the economy the way to cure some of our economic ills is to foster small businesses and make capital more available, then to be consistent we ought to carry that all the way down to the standardization activity. But of course the government is never known for necessarily being consistent.

So, it's a problem. That isn't very helpful. But it is a problem. I know. I was involved. The one that Mr. Peyton mentioned of formal relationship between ANSI and the National Small Business Administration and it was designed to try to identify standards activities that were of particular interest, to try to use available communication networks to inform, to try to get input back. It sounded good on paper, but I suspect like most things it was never very satisfactory. And maybe it's bucks again. Bucks, will; desire, I don't know. You have to get in and play. If anybody denies you the opportunity to play, that's when you really get some interest then.

Other questions or comments on Dr. LaQue's paper?

Yes, sir?

MR. ELLIS: I'm Wayne Ellis of H.P. Fuller Company. Dr. LaQue has drawn some interesting parallels of the events and forces that formed the SCC and the events that we're considering here at this conference. And he's also told us a number of things about the negative positions that developed during the debate on the SCC. I wonder what were the principal positive arguments that developed during that debate that convinced the Parliament of Canada to pass the act?

Could you speak on that or perhaps Admiral Hennessey would talk to it?

DR. LAQUE: I'm not sure I heard the question, but I gather --

MODERATOR SIMPSON: The question is, can you identify some of the

concerns that they had in order to create the Standards Council. Why did they overcome them? What were the positive reasons? Why was it created? Was something broken that they had to fix or what? Why did they create such a thing? To get Ralph Hennessey a job, I suppose.

DR. LAQUE: The best I can refer you to are the excerpts from the debate where the minister who was sponsoring the act stated why he thought it was needed. You will find many other statements in the printed version of this paper when it appears.

Apparently, the Canadians were not satisfied with the degree to which they were being represented in international standardization activities in particular.

MODERATOR SIMPSON: Maybe they concluded the activities were quasi-governmental or quasi-public in nature and they needed a counterpart organization to adequately deal with them.

Comments or questions? Suggestions?

Ralph? Tell us why they created that just to get you a job.

MR. HENNESSEY: I wish there were a simple answer to that question, Dick, but there is not a simple answer. The opposition was there, but although it was vehement at the time on the part of the CSA, to a limited extent by the Canadian Chamber of Commerce and one or two trade associations, the bulk of the interested parties in Canada either supported the idea or were silent.

A very significant level of support came from the 10 provinces. There was a federal provincial conference in 1968. And for once in Canada's history of federal provincial relationships, there was complete unanimity between the federal government and the 10 provinces on the need for such a body as the standards council and a further feeling, rather fuzzier, that there was no way that anyone could see that this was a task that could be taken on by a purely private sector organization such as the Canadian Standards Association.

Also, of course, the liberal government had a majority in Parliament. I think, while I'm on my feet, I should mention a couple of points about Dr. LaQue's presentation.

His comments on the Standards Council and its success or otherwise were quite factual. I think it needs to be remembered, though, what John Rankine said in his presentation today, that things that work in one culture don't necessarily work in another.

One of the reasons why the Standards Council has been successful is that we have about a half century's experience in our constitutional arrangements of what we call crown agencies. These are bodies set up in the main by Parliament to operate at arms length and without interference of any kind from the government of the day. And this has really been one of the key elements in the success of the standards council, to use the minister's own words, back in 1970. We have been seen to be independent of the government.

Now, if in your system, your constitutional system, you can envisage this same sort of thing operating, then I would suggest that there is a direct analogy. But I think you need to ask yourself that question in the first instance.

MODERATOR SIMPSON: Thank you.

Frank, let me ask the question. If you've applied your 10 criteria to the present organizational structure? If so, what was the score?

DR. LaQUE: I think it would fail on four or five of the criteria. It can be done. I hope the study group will do it.

MODERATOR SIMPSON: Howard?

DR. FORMAN: I'll speak for myself. I'd like to comment on the question that Ralph raised but didn't know the answer. I'll give you an answer. The cultures are strangely similar. We have quite a number of organizations in the United States, under our constitution, under our legislative system, which are quasi-public in nature and which are free of government interference though some people seem to think it might be otherwise.

I've actually identified a number of them. I'll be happy to send you copies of the charters. There are statutes. And all the other things. You'll find out that culturally we're coming up to you, Ralph.

MODERATOR SIMPSON: Are there any other questions or comments?

Frank?

DR. LaQUE: I'd like to have the privilege of making a final statement.

As you will find when you read the published version of my paper, I have been rather critical of some versions of my paper. I have been rather critical of some of the actions vis-a-vis the government taken in the past by ANSI. I did this deliberately so as to provide something for the record for consideration by the next gang to make any study. I have a feeling that having reached my 76th year, I'm not going to have many more opportunities to put things into the record and I've taken advantage of this. I hope you

will treat me accordingly.

(Applause.)

MODERATOR SIMPSON: Right on schedule for that all-important half-hour coffee break.

(Whereupon, a brief recess was taken.)

MODERATOR SIMPSON: Could we all take our seats? Our next speaker this afternoon is Dr. Cooper, assisted by Mel Green. His subject is international involvement of U.S. standards. Dr. Cooper?

INTERNATIONAL INVOLVEMENT OF U.S. STANDARDS
Presentation by: W. E. COOPER

DR. COOPER: I appreciate this opportunity to address the impact upon U.S. standards writing bodies of the adoption of their standards as de facto international standards. Although I recognize that this occurs in other successful standards developing organizations, I intend to use the American Society of Mechanical Engineers, ASME, as my organization of reference.

In order to help you to appreciate the evolution of a standard or a code from a domestic standard to a de facto international standard, I am going to provide a bit of history of ASME codes, standards and related accreditation activities.

Bert Melville this morning suggested we ought to get a little closer to the trenches. I suspect we'll get a little closer here than we've been before with side tours through several lawyers offices.

ASME pioneered voluntary standards. When ASME began developing performance test codes in 1884, only four years after the Society was organized, the public had no way of knowing what to expect of mechanical equipment. Small businessmen and engineers had no baseline against which to write a purchase order. Therefore a small group of ASME members decided that codes were needed for performance testing of equipment.

In 1885, ASME organized a standardization committee on pipe and pipe threads. In this case, the engineers and allied scientists recognized that for an industrial society to prosper, there must be standards to provide for interchangeability.

These are two of the three major reasons for having national standards or international standards: to provide a basis for establishing measures of performance and to provide for interchangeability of parts.

We believe that the proper way to develop these standards, and the way which we have used, is to have balanced committees (including interest groups such as manufacturers, users, academia, research engineers) work on these codes and standards and interpret these codes and standards, whether it be international or national, of course.

The third reason for needing a national or an international standard to provide for protection of public health and safety on a basis uniformly acceptable to governmental authorities, is the reason I'm going to pursue in more detail here today.

Back near the turn of the century, late 1800s , early 1900s, there were thousands of boiler explosions with resulting deaths and injuries. To give you a feel for how bad it was in terms of rough numbers, over a five-year period across the end of the century, the weekly average for boiler explosions was slightly in excess of six and the weekly average of deaths was slightly less than five.

As the suffering mounted and the public became aware of the horrible situation, the politicians at the city and state level enacted individual standards for boiler construction. These standards were not uniform. Materials and designs acceptable in one jurisdiction were not acceptable in another. Inspectors qualified in one jurisdiction didn't meet the qualifications of another jurisdiction.

The result was a maze of various and conflicting standards in different parts of the country. In 1911, ASME formed a boiler code committee to obtain the cooperation of all groups concerned to formulate one overall set of codes and standards for construction, operation, and maintenance of boilers.

Since then that committee's name has been changed to Boiler and Pressure Vessel Committee and its scope changed to include power boilers, heating boilers, nuclear components and systems, nuclear in-service inspection and pressure vessels, metallic and non-metallic.

Now, this was the third reason I cited for having national standards, to provide for protection of public health and safety on a basis uniformly acceptable to governmental authorities. But I think you all recognize that if each and every nation had a standard on this subject, we would still be in the same situation internationally as we were in the early 1900's because each state had a law and a standard of their own.

Now, the boiler code, since 1915 to the present, has provided rules for accrediting organizations with the intent of the accreditation activity being to provide a visible mark for users and regulatory persons, to differentiate between a boiler design fabricated and inspected in accordance with

the code and one which was not so constructed.

The accreditation activity was extended from the United States to Canada during the 1930s by the referencing of the code on a voluntary basis by the provinces of Canada. This action changed a purely domestic code to one of limited international recognition.

Because the provinces of Canada and the states of the United States enforced the code, boiler and pressure vessel accidents significantly decreased in number, despite the fact that the operating conditions were becoming much more severe.

For those boilers and pressure vessels which were manufactured in geographical areas of the world outside of Canada and the United States, hence were not eligible for construction by accredited organizations, the individual states, with the assistance of ASME, developed rules for equivalency.

The system worked quite well in North America. Then during the Kennedy rounds of tariff discussions, the United Kingdom charged that the ASME accreditation program was a non-tariff barrier to trade.

For nearly 10 years, ASME and the national board explored with the United States State Department mechanisms which would have permitted the ASME to extend its accreditation to the world, without success.

In July of 1970, the United States Justice Department brought a civil suit against the ASME and the National Board, alleging violation of the Sherman Anti-trust laws. Through the efforts of government, ASME and National Board lawyers, an amicable agreement was reached and signed on September 11, 1972, permitting ASME to extend its accreditation and the National Board to extend its registration of boilers and pressure vessels to any place in the world.

This National Board accreditation is a means which provides traceability of the boilers and pressure vessels from the manufacturer to the user.

In order to provide consistency with the laws of the various states that made it mandatory to register boilers and pressure vessels with the National Board, the ASME procedures for implementing this agreement require that if the ASME code symbol stamp is to be printed on the vessel, the inspection must be done by inspectors holding a valid National Board commission and each product that the foreign manufacturer stamps with the ASME symbol also has to bear the authorized stamping of the National Board.

Now, this mechanism permits an interesting finding. In the time period since this system has been put into effect, approximately 60 percent of the boilers and pressure vessels so-manufactured outside the United States and Canada are used outside of the United States and Canada. In other words, the majority of the product which is ordered to the requirements of the ASME code from foreign manufacturers is used by foreign users.

Since 1977, the number of foreign manufacturers accredited under the procedures of the Boiler and Pressure Vessel Code has approximately doubled.

To the best of our knowledge, this was the first instance of federal interaction with a code, standard or related voluntary accreditation program for the purpose of broadening the geographical boundaries of the activity.

Through the broadening of the geographic boundaries, the Boiler and Pressure Vessel Code became a de facto international standard.

The evolution of a code or standard to a de facto international standard carries with it certain obligations. You must provide distribution centers about the world. The standards developing organization must prepare its volunteers and staff for increasing numbers of inquiries. And as a code or standard is accepted about the world, non-North American residents want to participate.

ASME has always provided for input from about the world, however the level of activity is increasing from sporadic to regular. ASME handles foreign participation as it does North American participation. All meeting rooms where proposed revisions, reaffirmations, or new standards are being considered are open to the public. Foreign residents who have demonstrated their qualifications for membership on a particular committee through participation as a visitor may be invited to membership.

Through the evolution of a domestic standard to international recognition, the host standards developing organization evolves a document that reflects the technological advances and safety concerns of the world. For example, the Germans and Japanese have had considerable input in writing the rules related to pressure vessels. The French have participated in nuclear vessel rules and the Belgians and Swedes in accreditation.

These are but a few examples that come to mind. The important point is that foreign nationals need to be provided with the opportunity to participate. Some argue that this creates a problem when it comes to international standardization because they fear these individuals will have two votes, one in the U.S. domestic standards, second, in the international standard.

It's going to turn out, as you see later, that this argument is pretty academic, because it's difficult, if not impossible, to develop an international standard by the present system when a strong domestic standard exists which has attained international stature.

Now, we'll turn to an item which came up for discussion earlier today as a result of comments which Bert Melville made. At the suggestion of the Department of Commerce several years ago, ANSI prepared and approved guidelines for voting on proposed international standards. This was at approximately the same time that ISO changed international documents from recommendations to standards.

The ANSI guidelines for voting on international standards, as was discussed earlier this morning, provide that where an American national standard exists, the technical advisory group, the TAG, can recommend an affirmative vote on that international standard when the proposed international standard is compatible with the American national standard or when the committee responsible for the domestic standard is willing to revise the U.S.A. standard to be compatible with the proposed international standard.

The guidelines require that otherwise the TAG must recommend a negative vote and provide the technical reasons for the negative vote.

It's our opinion that these guidelines are reasonable but it's our recommendation, from an ASME viewpoint, that these guidelines should be considered to be rules. And we do operate in that manner.

Perhaps because we operate in that manner, but we don't see any way to do otherwise, it's difficult to develop an international standard where there is a dynamic U.S.A. de facto international standard.

Let me give you an example through an experience that I had. The ASME Boiler and Pressure Vessel Code is such a dynamic de facto international standard, seeing as how it is revised every six months by addenda, that the committee meets six times a year. Subgroups and work groups often meet more frequently. One of the sections of that Code, Section III, covers nuclear power plant construction.

In 1975, an ISO committee on which I was the U.S. representative, requested that the U.S. prepare a draft which denationalized the United States rules for nuclear pressure components and submit the draft as a proposed international standard. Section III was carefully reviewed and all references in Section III to national standards and specifications were removed, and replaced with wording which, in effect, stated that a particular aspect would be in accordance with the standard in effect in the country implementing the international standard.

Consistent with Bert's comments of this morning, where the resulting international standard contained some ASTM standards and some other material standards, this proposal contained no material standards. It simply said that, if you are going to use this standard, you're going to need to adopt material standards to be consistent with the technology expressed by this standard. You choose those from your own national product. And you have available to you as guidance the work of the originating country, for whatever reason you want to use those.

We thought that perhaps this approach would get around the difficulties such as you cited.

Well, it didn't work. The standard was not accepted. As a matter of fact, the secretariat never even put it out for distribution.

In 1980, the United States was requested to try it again and we are doing so. But because the domestic standard is so dynamic, it would be difficult, if not impossible, for the United States to vote in favor of that international standard, even though we wrote it ourselves, based on our own work.

The problem of course is that international standards are rather static. There is no mechanism for the issuance of interpretations or the preparation of appropriate revisions in a timely manner.

Another example. ASME is the administrative secretariat for ISO TC-11 covering boilers and pressure vessels. Since the international documents have been changed from recommendations to standards and since the ASME boiler and pressure vessel code has in itself become a de facto international standard, there is essentially no world interest in developing an international standard.

So where are we? We spent a lot of time today, in Bert's words, trying to decide how to organize the army. Perhaps here we are down to a company level in a problem. It's a problem which exists. It is a problem for which many of us have spent frustrating years in international standards activities trying to find a resolution. It's a kind of problem that we do not think can be resolved with the present system. This does not necessarily involve the issue that, it may not be broke, but it sure as hell is bent.

If we're going to encourage people to work on international standards, we're going to have to find ways to change the procedures in a manner that solves problems instead of making them.

So, we have a possible alternative approach to suggest. We believe that as an alternative to redeveloping international standards or de facto international standards where de facto international standards exist, that the international standards organization should recognize the existence of such de facto international standards committees where the standards developer recognizes its international responsibility and assures that four things are

done in the preparation of the domestic standard.

First, the organization must provide for participation of interested parties from about the world.

Secondly, the standards must be developed in language that reflects the technological advances and safety needs.

Third, the standard must not include language which gives a competitive advantage to a geographical region of the world.

And last, the standard must be supplemented by administrative procedures and unique national requirements which are prepared as separate implementing standards to this standard which is expected to receive international use.

Such recognition would assist the United States in meeting the requirements of Title IV of the Trade Agreements Act of 1979.

Formal ISO recognition of such de facto international standards as actual international standards would be achieved. Each nation applying such an international standard would have to establish administrative procedures and separate implementing standards, such as permitted national materials specifications. In doing this, they would have the procedures of the originating country available as guidance.

When de facto international standards exist, we believe that such an alternative method would result in a procedure to obtain international standards effectively.

Thank you and I'd like to ask Mel to join me up here.

(Applause.)

MODERATOR SIMPSON: If I could be permitted an observation before I call for the first question or comment, I might say that the paper calls on ISO to recognize certain national standards. But there is another entity that has a role of recognition, that's the GATT. We've been talking about the GATT standards code. And as an observation, I would suggest that the GATT standards code recognizes as international standards documents other than those prepared by ISO, IEC, and other inter-governmental bodies. For instance, it may well be that the ASME Boiler and Pressure Vessel Code is more than a de facto international standard. It may be, in fact, an international standard under the rules of the GATT. All it takes, all it takes under the rules of the GATT, is to define an international standards organization that is open to participation around the world, such participation is received, such participation is taken into consideration, et cetera. In other words, the type of

things we talk about in national consensus.

If you just open it up to the foreigners, the documents you produce are, in fact, the international standards under the GATT as opposed to de facto. They are, in fact, a set of international standards. I'll propose that most ASTM standards, for instance are, in fact, international standards, for instance, are, in fact, international standards under the rules of the GATT and many other organizations.

DR. FORMAN: Dick, it seemed to me you are having trouble with words and I'm going to try to suggest something to a guy that normally doesn't need a suggestion. When you say that it may not be de facto but it is "in fact", it's a sort of confusing. I'll borrow a term. What you're saying, I think, is not only will it be de facto, it actually becomes de jure. Under the body of the GATT Code, it becomes a legal document, de jure. Do you buy that?

MODERATOR SIMPSON: That sounds like lawyer talk to me, but I think I'll buy it.

We have a question behind you, Howard.

MR. CAMPBELL: I'm Ken Campbell from Firestone. In our ISO tire committee, we spent a lot of time with translation problems, primarily between English and American, but secondarily between English and French. And the outcome of the ISO standard is a polished English version and a polished French version. How do you presently or how do you propose to handle the translation of de facto standards other than giving it to Berlitz and having them chop it up terribly?

DR. COOPER: Let me first suggest that in your trip through Heathrow Airport, if you look carefully in the book shelves, you can find an English-American phrase book. I find it very useful over there.

The big breakthrough in the TC-85, the nuclear standards area, has been the taking over of the secretariat by West Germany, and their immediate statement to the French that this translation nonsense stops immediately. And there has been somewhat more progress since then.

Now, ultimately, you do need to issue the standard in the various international languages. But the Russians, which is the third language in ISO, have been providing their own translation service for years, and the system seems to work.

Now, there is a problem. Whether we call it de facto or de jure or whatever we have here, well, there is a major problem in taking a document such as, let's say the Boiler and Pressure Vessel Code, which has been our example, and using it as an international standard. I think maybe, Mel, if you were

to comment on the experience on translation into Spanish, it might interest some people.

MR. GREEN: Yes. Some years ago, we entered into an arrangement with EMIMI, which is the electrical and mechanical engineering society in Mexico, for them to translate the ASME Boiler and Pressure Vessel Code into Spanish. One of the problems that the Mexicans ran into was in terminology because there is not always a Spanish word for the English word. And if you look at the Spanish versions of the Boiler Code, you will find English words in there.

Now, this has also happened; the Boiler Code, through arrangements has been translated-- not the present version -- to other languages such as the German language, and they also ran into problems insofar as translating some of our technical terms.

MODERATOR SIMPSON: Yes? Down in the front here?

MR. LEVINE. I should like to urge a little bit of caution in the notion that, A, a de facto standard might indeed become internationally a de jure standard from the other side of the coin. Bill McAdams' presentation this morning laid out, in one part of it, a number of regional organizations in Europe which are very busily engaged, indeed, in writing standards that are not international standards, that are regional standards, comprehending, obviously, a very large market in a very large number of bodies on occasion.

Now, in that circumstance, pressing the notion that there is de facto acceptance in a fair number of places and this becomes equivalent to a de jure international standard, can, I suggest, turn around and bite us very, very hard indeed, particularly since unlike the court-ordered rules under which ASME now works, we as yet do not have participatory rights in most of those regional standards organizations in Europe.

MODERATOR SIMPSON: Since I raised that question, let me respond to that, react to that.

I'm not suggesting that we should encourage the notion that a national standard that enjoys a de facto recognition is a good thing. What I'm proposing, what I'm suggesting to you, is that what we have now been calling a national standard, that has been prepared under rules, such that participation in that quote national standards activity is open to all parties from all signatories to the GATT, then that national standard is, in fact, de jure, an international standard under the GATT standards code. Whereas, a de facto standard is not.

I'm arguing to you that if you look at the rules of the GATT, those

of us who participated in drafting those had it in mind. Maybe our trading partners didn't have it in mind. A regional standard, such as CEN, CENELEC, the common market, the regional standard doesn't meet the rules and the criteria laid out in the GATT but an ASTM standard does. The regional standard doesn't meet the rules because its participation is limited to those in the region.

ASTM standardization, as I understand it, and I stand to be corrected, perhaps the ASME Boiler and Pressure Vessel Code as now constituted under the rules of the GATT is an international standards activity. It is an international standards activity under those rules.

MR. GREEN: Dick, I'd like to make a point. I think one could infer from your statement that we were required to open up participation to the world as a result of a court order and that's not the fact. We were, we agreed to go worldwide with our accreditation but they did not ask us to provide for participation from areas of the world outside the United States and Canada where we had provided previously. In fact we had provided previous to that insofar as participation to Mexico and other countries but it would just be the actual accreditation activity that they wanted us to extend to the world rather than the participation in our development of the codes and standards.

MODERATOR SIMPSON: Then I stand corrected. ASME Pressure Code then is not an international standard. But my understanding is that the international, that ASTM standards may be, and I use ASTM as an example. There are others.

Let me read to you the definition under the GATT standards code. An international standard, what is it? The term "international standard" means any standard that is promulgated by an international standards organization. Again, like my moderator, it's one that moderates. Not terribly helpful.

What is an international standards organization? The term, "an international standards organization," means any organization, a. the membership of which is open to representatives, whether public or private, of the United States and all parties to the agreement that are engaged in those related activities, period.

DR. COOPER: Just to comment, all ASME codes and standards developing committees are so open. Now, perhaps it's necessary that we do a better job of making people familiar with it, in order to qualify.

MODERATOR SIMPSON: That doesn't make them any less international standards. Some of the other provisions of the GATT say that when you are in the international standards writing business you're supposed to give some notice. You're supposed to have an inquiry point to provide some information, etcetera. I commend to you that you are writing international standards and really didn't know it.

Dr. LaQue?

DR. LaQUE: You've anticipated some of the things I jotted down here. But I've noted from what I've heard and I think I know that there are at least four sources of what can be called international standards. Number one are ISO and IEC standards, as specifically referenced in the GATT code, as being a requirement. The second are the ones you've just talked about and I'll call them de jure international standards, such as those by ASTM and many by ASME, that meet the definition of the code because they let people from other countries get involved.

The third one is the one you've just described, in compliance with the requirement that you let people participate in any new standards that you propose to develop. It then becomes de jure international standards by the GATT code definition.

And the fourth are the great many, for example, there are a lot of ASTM standards in use around the world that are de facto rather than de jure international standards because they are in international use. No one has recognized them as being such officially.

So, therefore, the objective of ISO is to remove standards as barriers to trade. The objective of the GATT code is to remove standards as barriers to trade. So there appears to be, now at least, two routes by which you can develop the response to this objective. You can go through ISO or IEC or you can comply with what the GATT code tells you.

There may be a question that arises in the future as to which is the better route to follow. Which is the easier one to deal with? I think that any further study that may indeed be made as to how the U.S.A. is going to respond to these needs, we're going to have to take into account how to respond to both groups, not just deal with the old accustomed one.

Thank you.

MODERATOR SIMPSON: Other comments? Questions? All the way in the back.

MR. HODGES: Larry Hodges, J. I. Case Company.

In regard to ISO and IEC standards, at least their procedures and their formal assigning of an ISO number to that standard, for example, is a means of communicating to the world that this is the recognized international standard. In regard to your de facto standards, how do you propose to communicate that information to the rest of the world? This is, by whatever process, de facto. This is the international standard. How would I tell that it's this process you are talking about here?

DR. COOPER: I don't think you would, which is the reason we suggest that the ISO procedures should somehow recognize these. Your point is well taken. Unless there is some way that's easily demonstrated on the cover that indicates that it's an international standard, it isn't. In the average use.

MR. HODGES: Okay. Then at least one alternative in giving recognition to these is to suggest to ISO and IEC that they modify their procedures and that another way of telling the world that is to test the marketplace and establish that fact?

DR. COOPER: That's correct. And, of course, there might be reasons to use a different type symbol or designation but it still will have the ISO identification.

MODERATOR SIMPSON: Just as a comment, under the frame of reference of the GATT my understanding is that the GATT doesn't specifically identify any organization as writing international standards. They describe what an international standards organization is under the GATT and they say, prescribe, some ground rules that the signatories, that is the countries, to sign, agree to abide by. One of these is to provide notice in some reasonable fashion. There are some other relatively innocuous provisions of the GATT.

But what I am suggesting to you is that an ASTM standard that was started yesterday and finishes a year from now, if it follows the published procedures is, in fact, or is, de jure, is an international standard under the rules of the GATT and you've completely complied with the GATT, then you don't have to notify anything.

The obligation that the other countries have is to follow what you're doing and take advantage of the opportunity to participate, the same as we would take advantage of the opportunity to participate if it were offered to us.

The difference with the CEN and the regional ones is that they don't offer that opportunity. If DIN or AFNOR or BSI opened up their process like ASTM, they would also write international standards. The same might also be an international standard. There's no conflict. It can be both national and international at the same time. Two different bodies recognize such.

Derek Barton?

MR. BARTON: How do you resolve the situation where one of these de facto international standards organizations is pursuing a standard which it hopes will be treated as international at the same time ISO or IEC is pursuing a parallel path? You come up with two standards, both of which are claimed to be international standards but which are in conflict.

MODERATOR SIMPSON: What do you do in that case? The GATT rules are

fairly clear. It says you haven't violated the GATT if you follow the ground rules. And you may have followed the ground rules in both situations. It doesn't say, it says if there is an international standard in existence, then you've just proposed a case where there are two in conflict. That's okay. You get a choice. You follow the rest of the rule. You have to reasonably consider them, you know.

Howard?

DR. FORMAN: Dick, by way of clarification of your definition of an international standards organization under the GATT code, you say the principal requirement is that they not exclude anybody from any other country from participation. Correct?

MODERATOR SIMPSON: Yes.

DR. FORMAN: In your opinion, if there is no express exclusion in their bylaws or whatever, would they then qualify?

MODERATOR SIMPSON: I think that's a lawyer-like question and I think a lawyer should answer it. I don't know. Maybe that's within the confines of GATT. That may be one of those areas that would be subject to interpretation. I don't know. I don't have the answer to that.

DR. FORMAN: I was just suggesting that if you require an express exclusion in order to, let's say comply with your understanding of the international standardization group, then we would have maybe 400 or so organizations in the United States that are qualified.

I'm assuming, for example, that if they should apply for listing under the OMB circular, that they would not exclude anybody. If that should be the case, would you then think of them as international standards organizations?

MODERATOR SIMPSON: Well, just to go back to your question, I think that I focused on a narrow provision of the GATT, and that's the definition of what is an international standard under those terms. There are other provisions of the GATT that call for notice, call for opportunity you know, and it's incumbent on the other countries to take advantage of that.

Now, it may be that it might fail, not because it isn't an international standard under the GATT but because there was no notice given. It may fail for some other reason.

Back there, Howard?

MR. GAY: Gregg Gay, Department of State, Office of International Conferences. If I understand what you are saying, notice has to be given to the GATT by the signatory to GATT which is not --

MODERATOR SIMPSON: No. Just notice published at some point within your country.

MR. GAY: In other words, anybody within the country can give notice to GATT. Is that correct?

MODERATOR SIMPSON: No. Well, again, I'm in an area I probably shouldn't have gotten in, like an impartial moderator. But I'm suggesting it to you as food for thought. I believe the GATT standards code says that there is no obligation to notify the GATT about all the standards activities. The obligation is to identify to GATT where the notice will be.

For instance, the federal standards writing activities, the notice point is the Federal Register. As long as you publish what you are doing in the Federal Register, you published the proposed standard in the Federal Register, you have satisfied all of the requirements of GATT as to notice.

MR. GAY: But somebody still has to tell GATT where the notice point is?

MODERATOR SIMPSON: That's right. I'm suggesting that there is a requirement under the GATT, in both the government and the private sector, to identify where you will find that point. Now there is nothing that says that you can't define it as multiple points. It may be that you need a counterpart of the Federal Register in the private sector.

If you had that, then you would satisfy another part of the GATT, that is, subject of notice. You don't affirmatively notify the GATT itself. The concept is you provide, if the foreigners look and see what you're doing, you provide them what publication should be read, or publications.

I finally triggered somebody from the government who is going to dispute my interpretation. I was waiting for that. Maybe he'll agree with me. I don't know.

MR. ABELSON: Don Abelson from the U.S. Trade Representative's Office. I'm not sure I quite disagree as to your reading of the definition of the standards code which is correct. It's a two-part definition. The first one defines what an international standard is and that is: One developed by an international standardizing body. And then that defines an international standardizing body as one that is open to at least all signatories to the standards code, at least all signatories.

The key, as I understand it, is the definition of the word membership: One that is open to membership to all, to at least all signatories of the standards code.

The standards code then goes further to say that where a term is not defined internationally recognized terms shall be used. That's article 1.1 or 1.2.

The definitions were based upon the UNECE definitions and the ISO definitions. So you would have to go back to membership. This is an off-the-cuff interpretation. What you come down to is: Open to full participation without any qualifications. And there is the difference in that, I think. Dr. Forman was talking about something like CEN or CENELEC or CEE have qualifications. You have to have a national authorizing institution, you have to have a national authorizing institution, you have to have a national inspecting institution, etcetera. And that closes the membership, the qualifications for membership.

MODERATOR SIMPSON: I'm just suggesting. I believe there are some U.S. organizations which can meet that definition of membership, that presently write national standards and that by definition those standards are also international under the GATT code. I believe there are some that meet that.

MR. ABELSON: It's quite possible.

In response to Mr. Gay's point, notifications are made. The requirements in the standards code is that when you do not base your international standard on an international standard you then go through a series of open procedures. For central government, mandatory standards and certification systems are not necessarily mandatory but for all certification systems of central governments a notice must be sent to the GATT secretariate of that effort to begin a standard or rule certification system.

MODERATOR SIMPSON: Maybe I could ask him one more question of interpretation because he is surely much more current with the GATT standards code than I am.

You said, when the national standard is not based on an international standard then there is a requirement of notice. But suppose you take the case where the national standard is being developed and you believe that at one and the same time you are developing an international. So is one based on the other? Is there a requirement for notice? Maybe there isn't any requirement for notice.

MR. ABELSON: There are no requirements in the standards code for how you conduct international standardization. It only affects signatories to the code and the only body that can be a signatory is a central government. So ISO is not affected by the standards code, per se.

If you're developing a new standard, you could get around it in some way, I imagine.

MODERATOR SIMPSON: I'm suggesting that ASTM has the same latitude as ISO had when they developed their standard. They have the same full weight and force under the GATT standards code as an ISO standard.

MR. ABELSON: Something to think about.

MODERATOR SIMPSON: Over here in the middle, please.

MR. DUTTON: I'm John Dutton of General Electric. I've been associated with a number of IEE standard which are not too different in many respects from ASME. I wonder if you would turn your spotlight on IEE and see how it would stack up?

MODERATOR SIMPSON: That kind of question, I'm going to ask someone else to answer. Ivan Easton is here. He can answer that question.

MR. EASTON: No, but I'd like to answer another question.

MODERATOR SIMPSON: That's not fair.

MR. EASTON: I would like to comment about the moderator position. My name is Ivan Easton. I'm currently president of the U.S. National Committee of the IEC which does not make me an expert on the GATT code. I also come from New England where we have an institution called the town meeting.

The presiding officer is known as the moderator. In a New England town meeting the moderator's word is law. I hope that is not the case here because, Mr. Simpson, I cannot believe your definition of an international standard.

If three citizens of France participate in an ASTM or an IEEE or an ASME committee, surely you don't contend that France will accept that as an international standard, simply because those three citizens attended.

I believe the participation intended is clearly a recognized organization in each country, not an individual citizen. Putting the shoe on the other foot, if a citizen of the United States happened to participate in a BSI or an AFNOR or a DIN standard, surely we would not think that we should be bound to that standard unless the corresponding standard body in this country had endorsed it.

Thank you.

As to Mr. Dutton's comment, I think he's correct. IEEE as a technical organization specifically identifies itself not as a U.S. organization, not as an international organization, but as a transnational organization. In fact, some but not many of its technical committees do have broad international membership. I can think of one in particular, the Atlas Language Committee for Automatic Testing. It's a broadly diversified international committee. It meets one-third of the time in Europe and two-thirds of the time in the United States.

MODERATOR SIMPSON: I kind of prefer you, prefer that you had stopped where you said that the moderator's word was law.

Other questions?

I'm not suggesting in my definition, by the way, that France would accept it. They'd probably oppose it like hell. I'm saying that I think the GATT would accept it. It might cause a revision in the GATT.

We'll go up there and then down in front.

MR. MILLEVILLE: In ISO technical committees, it will come as no surprise to those who are not involved that there are occasions when agreement cannot be reached. In such cases, sometimes what is done is that a technical report is published. It occurred to me sitting here and listening to this and hearing the reaction to a question that, "How does an international code user get to this de jure international code," might be answered by closing the gap with the technical report.

The fact of the de jure international code almost guarantees that there will not be consensus support for an ISO code duplicating the subject matter. That committee would be a very appropriate publisher of such a technical report and would provide a flag to get someone who isn't aware of this de jure issue to find it by reading a report that says, in fact, that there's this code that is published over there in the new world that has been getting some use here. You might want to take a look at it.

MODERATOR SIMPSON: Down in front. Bill McAdams. Then we'll go back to the gentleman up here.

MR. McADAMS: I accept the fact that the moderator's word is law, however, it seems to me that you are talking about ambiguities in the GATT code and this is certainly one major one. But there's a worse one. The GATT code has a whole series of complaint mechanisms and how they are carried out and if you think the other one is ambiguous, you read that one or you read that whole set of procedures and you'll find they are even more ambiguous. But in the end, whether or not a standard is really an international standard will be settled by that complaint mechanism scheme.

MODERATOR SIMPSON: I think you're quite right. We'll go up in the middle.

MR. FEELY: Frank Feely of Exxon, again. I think I'm with Ivan Easton in that there is a problem in acceptance at the present time of de facto international standards. This is not to say that they don't exist. In the past 40 years I've been involved in building oil refineries around the world, 28 different countries, and we have built to all kinds of standards as required by the national government. But there are few what I would call really de facto international standards, as apply to our refineries. And certainly the ASME Boiler and Pressure Vessel Code is one of them. There are some ASTM standards. There are some IEEE standards.

There often will be competing standards in other countries, particularly using DIN as an example. Now, it seems to me that the GATT code has probably not really adequately dealt with the subject and it's going to be a problem to get it all straightened out. I hope it isn't all done through legal procedures. I dislike engineers and technical people turning things over to lawyers to settle for them. I'm just constitutionally against that.

I would hope that ISO would rise to this challenge because it seems to me that there is the place that some sort of a streamlined procedure, well, there are many things where there is not agreement but there are de facto standards and certainly we need to straighten that situation out and get our house in order.

I would also subscribe to what Bill Cooper said and that is that the action in one area, even though it may be clearcut that the Boiler and Pressure Vessel Code, ASME, for example, is in truth de facto standard, still requires action in the materials field in many countries in order to get equivalents. And so that would have to be cleared up as well.

MODERATOR SIMPSON: Any other questions or comments? Dr. Cooper?

DR. COOPER: An earlier speaker said that the problem is our own actions. Another one of the earlier speakers said that there's a changing situation on the quality of the standards prepared outside the United States, that at one time maybe we were right in believing that ours were, quote, the best, unquote, but more recently that's no longer true.

I hope this discussion has raised the issue that in addition to seeking organizational routes to resolving the issues on international standards, we need to seek new and additional approaches so that we can take advantage of what we have around the world and not just the United States, because we learn also.

We can take advantage of what we have today and quit fighting over the nits and the details of that and get on with the creating of standards. In many areas where we have absolutely nothing we fail because we are so occupied in the in-fighting and the organizational debates that we have today.

Thank you.

(Applause.)

MODERATOR SIMPSON: I think that's an appropriate point to call the conference adjourned until 9:00 o'clock in the morning.

(Whereupon the conference was adjourned at 5:15 p.m.)

PROCEEDINGS - PART II

of

CONFERENCE ON

October 16, 1980

MODERATOR SIMPSON: Before I call our first speaker this morning, let me remind everybody that when you do pose a question or offer a comment, since we are taping it and there will be a transcript made by the Department, would you remember to please identify yourselves.

Our first speaker this morning is Alexander "Sandy" Trowbridge assisted by Gerry Underwood and Larry Hodges. The topic is "Standards, the U.S. Economy and Government-Industry Cooperation."

Mr. Secretary?

STANDARDS, THE U.S. ECONOMY, AND GOVERNMENT-INDUSTRY COOPERATION
Presentation by ALEXANDER B. TROWBRIDGE
with the assistance of Gerald T. Underwood and Lawrence H. Hodges

MR. TROWBRIDGE: Thank you, Dick, and thank you ladies and gentlemen. It's kind of fun to be back in this large auditorium where I've had some happy moments and some unhappy moments in the service of the Department of Commerce.

This is a particularly happy time to come back, however, because I think you are focusing on a very vital question and I hope that I can add some substance with the very able assistance of Gerry Underwood and Larry Hodges, and of course our Moderator, to the consideration of a problem of major vitality and major importance that perhaps doesn't receive the recognition and coverage that it should have nationwide.

The subject of standards is still a very specialized area, given attention mostly by experts, notwithstanding this sizeable audience. I suppose one can forgive the general public for not having much interest in the subject, even though standards affect the lives of each and everyone of us. However, one is less willing to understand some disinterest among those who need to know more in the private sector and in government.

That is why I especially appreciate your attendance here today. It's a question of uneven application of interest. It reminds me, in a way, of Murphy's Law. You're familiar with that law, the one that says that if anything can go wrong, it will.

Tom Murphy the Chairman of General Motors has a new version of Murphy's Law which goes: "Whatever hits the fan never gets evenly distributed."

(General laughter.)

We can all agree, I think, that standards, both domestically and internationally, are important in the economy and in trade and they will reach

even new importance as we implement Title IV of the Trade Agreements Act.

There are, however, problems which we have to resolve before we can begin to achieve true international cooperation in this area. At home we have some difficulties between the private sector and government and in the management of the voluntary consensus standards systems.

We have an even greater challenge in our current economic dilemma. I'd like to cover some of these problems in detail, on how our organization, the National Association of Manufacturers, believes they should be solved.

I am convinced, on balance, that most of our problems in standards and in the economy can only be solved by some very much closer working relationships between industry and government.

Some of you may have heard that lovely story out of Texas that Lyndon Johnson used to tell about a football game down in his home town. A high school was very late in the game and they were down on about their five yard line. The coach was frantic to win it and he couldn't figure out what to do so he just took a chance and he grabbed a young quarterback who was rather inexperienced and said: "Get in there and do something."

The quarterback got in and called play number eleven and they went 95 yards, scored a touchdown and kicked the extra point. The gun went off and by golly they had won the game at the last moment.

After all the cheering was over the coach called the quarterback aside and he said: "Lad, you shouldn't have done that. You know, we've never practiced that play. What on earth made you think of it?" The boy said: "Well, coach, I looked up in front of me and there was our first best player and he was number seven and there was our second best player and he was number six and I put them together and called number eleven."

The coach said: "Lad, don't you know that seven and six make thirteen?" The quarterback said: "Well, coach, if I was as smart as you are we never would have won that ball game."

(General laughter.)

I think the point of this is that we ought to remember that the coach and the quarterback are on the same team and, secondly, it is helpful if they know how to count. And, thirdly, that any ball game gets won by coalitions. Coalitions of people working together.

In standards, as in some other areas, we have to realize to our embarrassment and disadvantage that we are still in some respects a parochial nation.

The United States has so large an economy, with the equivalent of fifty countries within our federal system, that we have felt generally self-sufficient. We have hundreds of organizations that write standards, hundreds more that formulate codes, and federal and state agencies that generate standards for safety, health, and the environment.

Our domestic voluntary standard system alone is so large, so complex, and so effective in assuring the quality of products that we have hardly considered the larger world beyond. Until the enactment of Title IV of the 1979 Trade Agreements Act, few had noticed that standards could be used as unjustifiable technical barriers to trade between the U.S. and other trading nations.

The real foundations of industrial standardization at the national and international levels are laid in the plant, the place where standards are used in manufacture. In the industrial sectors where they operate, manufacturing companies are the best source of information about the requirements which should be incorporated in national and international standards.

The NAM, as a trade association representing more than 12,000 of those industrial producers, does not itself write standards. But recognizing the important role that standards play in manufacturing we have an official written policy on standardization which is both brief and worth noting and I will read it to you:

"Voluntary standards, developed by industry through its trade associations, technical societies, and national testing laboratories and approved as American standards, have made a major contribution to orderly industrial development without impairing the flexibility of enterprise or the generally desirable diversity of industry products available to the public. We believe that American industry should continue to build comprehensive, integrated standards consistent with its advancing needs."

Similarly, NAM has a written policy supporting metric conversion in the United States. That policy is longer but it emphasizes an important point common to both policies -- their common nature.

As for metrication, NAM has supported metric conversion in the U.S. for many years -- particularly metric conversion on a voluntary basis. Conversion is taking place, but painfully slowly. Some members of Congress, reflecting a segment of public opinion, take a very skeptical view of metric conversion. We saw several bills introduced in the first session of this Congress to repeal the Metric Conversion Act of 1975. With due respect for this view, I consider the metric system a good example of beneficial international standardization.

Here we have a common measurement system, easily learned and understood, used by most of the rest of the world -- with the U.S. as the stand-out exception. Resistance to its adoption in the U.S. is not a good augury for international standards in general. But I am hopeful that it will change and we are going to be committed to working hard toward this end.

Sometimes it reminds one of the story of the ostrich that wandered into the oasis where there were some 200 other ostriches, all of whom had their heads buried in the sand. The ostrich looked around and said: "Oh, look, there isn't anybody here."

Meanwhile, the U.S. has a standards system at work that might give us cause to applaud ourselves and sit back in satisfaction. Unfortunately this is not a prudent cause. However ably the hundreds of standards groups are working to put some order into our domestic system, however widely the voluntary system is supported by individuals and companies that give it time and money, their contributions will be diminished unless we can sort out some serious problems and of course one of those problems is government.

This situation started in 1976 with then Senator Abourezk and his Bill S.3555. That proposed legislation might have seriously undermined not only the voluntary consensus standards system in this country but also the United States' role in the many international forums on standards.

If S.3555 did any good at all, it was to alert the standards community to developing threats to its operations and raise consciousness among informed members of the public that standards didn't somehow just happen.

When the bill failed to advance in Congress it seemed that those who shape the standards system could relax and get on with work. But that was not to be the case.

The Federal Trade Commission decided to get into the act. When the FTC published its proposed rules to regulate the voluntary consensus standards system it drew sharp reaction from the private sector. The first wave of responses opposing the FTC proposal numbered more than 1,000.

Hearings were held throughout the summer of 1979 and hundreds of witnesses were heard. I think the hearing record now stands at more than 27,000 pages of testimony, cross examination and rebuttal.

No one has computed how much this proposed regulation cost, not only the tax payers but the witnesses, the standards groups, individual companies, lawyers and association staffs. It would be an instructive case study in cost-effectiveness.

NAM, to cite one association, had staff from our law department, our consumer and regulatory affairs department and our resources and technology department working on it and although the proposed FTC rule was slowed down in recent Congressional action, the agency has not quite given up its determination to regulate standards.

If the private sector is being drawn into lengthy and costly struggles with its own government over standards, how can we possibly give enough attention to the area of international standards?

If the FTC continues to seek to regulate standards bodies, it will surely divert whatever commitments we want to make to international standards activities and to implementing Title IV of the Trade Agreements Act of 1979.

The Department of Commerce, itself, is now involved very closely with the domestic standards community through circular A-119 of the Office of Management and Budget. This circular was some three years in writing. It sets up the means by which government can work with the voluntary standards system so that the government itself does not have to develop what it rightly calls "needlessly unique" items.

NAM generally supported the circular, preferring its inherent intent for encouraging cooperation between government and the private sector to FTC's approach. However, when the Commerce Department got the job of implementing the OMB circular some new difficulties came along.

Although the circular and Commerce's proposed rules should be an entirely domestic matter between U.S. standards groups and the U.S. government, it apparently also is having some over-tones for international standards.

The American National Standards Institute has taken strong issue with the Department of Commerce's proposed rules as they apply to U.S. positions relating to international voluntary standards activities.

Here is an example of what might be an opportunity for government-private sector cooperation being impeded by government attempts to apply a regulation where it may not belong. Although the private sector pays all the bills and although the voluntary standards community has received recognition for doing a fine job, the government can't seem to leave well enough alone.

Such divisive impulse cannot but make U.S. involvement in international standards more and more difficult.

A NAM member recently wrote to us and put the problem this way: "Many good standards cannot survive the cost of government control and will slowly die, unable to afford the revisions necessary to stay current because of the added cost of government regulation. This vacuum will be filled either by costly, ineffective government standard attempts or lost to foreign

standards organizations not burdened by our government control. International Standards Organization standards, the tool of the common market, are presently a serious threat to many U.S. standards. Government intervention in our voluntary standards will strengthen foreign standards organizations who are, for the most part, unencumbered by government bureaucracy."

Another facet of the standards question is equally serious. The Trade Agreements Act of 1979 contained for the first time in any trade legislation a title, Title IV, relating to standards and considered their role as barriers to trade. Let's look at trade briefly as the larger context of the standards debate.

It's expected that the Trade Agreements Act will open up markets to U.S. exports in excess of some \$20 billion. In return the U.S. will subject about 15 percent of its purchases, valued at \$12.5 billion, to open competition.

Although tariffs have been significantly reduced through the Trade Agreements Act, there remain the important non-tariff barriers to international trade. The Trade Agreements Act introduces a number of legally binding codes of conduct affecting such important non-tariff measures as subsidies, countervailing duties, government procurement practices, industrial standards and specifications, and customs valuation.

Despite the growth of international trade, some six-fold since 1967 to more than \$1.3 trillion annually, and the growth and promulgation of product standards, the interaction of the two is still not fully appreciated. Although standards can be perceived as a means of facilitating international trade, they also have had the effect of distorting international trade competition.

I suppose the difficulty in understanding that interaction derives from the purposes behind standards. For example, the reasons for adopting a standard may be insulated entirely from international trade considerations. A variety of legitimate policy objectives may serve as a justifiable rationale for a particular standard. Nevertheless such a standard may result in some serious trade distortions, however unintended.

Some countries purposely manipulate product standards in order to protect the domestic industry or they employ a double standard requiring an imported product to meet more stringent requirements than a comparable domestic product. I am sure you are aware of Japanese requirements for labeling in metric units that have caused some problems for U.S. exports of food and drug products; of a company having to ship one hundred agricultural tractors in five models to Europe for testing or type approval; of the situation very familiar to all of us who have traveled in Europe of the conflicting electrical standards for a simple electrical shaver. You may have seen that our stores

now carry an entire kit of transformers and adapters for such use.

Yet, for all of its importance the subject of standards, domestic or international, fades quickly into less significance when we look at America's number one trade problem, our domestic economy.

Inflation is eroding the value of the dollar and is blunting our ability to compete at home and abroad. Higher U.S. export prices, while able in some markets to compete where greater inflationary trends exist, nevertheless are not able to balance costlier oil imports and they gnaw away at price gains brought by falling dollar values on world markets.

Imports continue to flow into our markets, taking advantage of our productivity decline and the impact of energy costs of everything from automobiles to steel to consumer goods, and many of these imports can and should be produced in the U.S. on a competitive basis.

And all the while the U.S. is still an attractive market, as money from overseas comes in to benefit from high interest rates and depreciated dollar values offer real estate and other bargains in a country still regarded as politically stable.

It's not altogether surprising that some of our citizens are skeptical of this trend because they have had some disquieting personal experiences. I refer to employees who have felt the impact of structural unemployment in a number of traditional industries that once gave this nation its competitive edge in world trade.

The human side of economic upheaval has a powerful reality of its own. Were this not the case, the problem would not be drawing such political notice. And we continue to hear political candidates reinforce the yearning for painless answers that swell within every anxious bread-winner.

But if the U.S. should adopt a posture of protectionism, I can assure you that standards as barriers to trade would seem like a pin in a battle with cutlasses. What lies within the center of our troubles and what casts such a long shadow across many worthy causes is the steady and alarming decline in America's industrial productivity growth.

The world perception of the decline of the U.S. economy is in some ways exaggerated. Often it is this perception that forms the underlying reason why this country's political influence has been markedly diminishing around the world.

Poor economic performance here at home, most notably in connection with inflation and flagging industrial output, sets outer limits for the

dollar's value in relation to other countries. The political significance of this deterioration is not lost upon either individual nations or the great international institutions -- the World Bank, the IMF, the GATT -- that were made possible, in a sense, by the great strength of the U.S. economy.

In fact, a strong U.S. economy, both actual and as perceived around the world, cannot but contribute positively to international standards and the bodies who seek to make them work and reduce their misuse as barriers to trade.

If America is losing political strength, in large measure because it has become economically flabby, it follows that if the country gets its domestic economy back in shape, it can once again be able to stay the course in the international political sense -- be it protecting our embassies from marauders or helping to make international standards work as a positive force for commerce and trade.

In a world that's infinitely more diverse and interdependent, the conduct of foreign policy on a rational basis would be especially difficult under any circumstances. I believe firmly that a revitalization of American industry will restore not only our productive capacity but our international influence as well.

The National Association of Manufacturers has embarked on just such a revitalization program for industry, not just for this year or next but for however long it takes. The program is designed to deal with inflation in its most fundamental aspects while at the same time strengthening the U.S. industrial base.

Every step in this positive, affirmative program lays the groundwork to support the competitiveness of American export activity and concomitant standards activity in the swiftly and implacably changing markets of the world.

Sound government fiscal policy is our first objective. For too many years now Washington spending has been increasing geometrically faster than the economy on which that spending is based. We have had federal deficits every year since 1969, coupled with huge trade deficits in recent years.

It seemed earlier this year that Congress and the President were putting teeth into the effort to balance the budget but of course some of these teeth have been pulled, mostly for political rather than economic reasons.

NAM is looking for legislation, not just promises, to limit federal spending to 20 percent of the economy's gross national product, the historical ratio between the spending surges of the 1960's and the 1970's. If this doesn't do the job, then a spending limit might be written into the Constitution.

Increased capital formation is NAM's second objective. It's self-evident that American industry needs a great deal of capital to modernize plants and equipment and to become more energy efficient. We are working hard on behalf of the capital cost recovery legislation beginning with the so-called Conable-Jones bill or the 10-5-3 bill as a means to stimulate new investment and accelerate the reinvestment in the productive capacity of the country.

The nation's economic policy has for too long centered on stimulating consumption and demand along Keynesian policy lines and, happily, I think is now beginning to shift its attention over toward the stimulus of investments and savings in what is known as supply-side economics.

Next comes federal regulatory reform. The use of regulation to achieve legitimate public policy goals requires balance and cost-effectiveness. Plant closings, lost business, increased costs, reduced competitiveness overseas were not caused by the national commitment to clean air and water. Excessively costly regulation -- and there are implications here for the standards issue -- has contributed to many of these problems.

NAM supports regulatory reform through legislation that opens up the regulatory process to rational scrutiny by business and labor alike, perhaps even jointly. Economic impact statements, sunset legislation, regulatory agendas and budgets, all are viable ways of reducing duplication and excess cost.

Our fourth goal is enlightened use of natural resources. There is more to this than simply achieving a national energy policy that encourages timely production as well as conservation. Clearly the nation must develop a full range of alternatives to dependence on oil from distant and increasingly unpredictable sources.

There is the additional necessity of assuring that neither a real nor an artificial shortage of minerals, timber and other essential imported raw materials frustrates this overall capacity for placing new emphasis on the nation's productive capacity.

It is no accident that increasing U.S. competitiveness in overseas markets is a key step in this six point program. The trade deficit of the last three years has averaged more than \$25 billion annually. In the context of a balance of payment strategy, NAM has testified that every other country in the face of growing import bills for oil, has turned to export expansion and import substitution and import policies designed to enhance the domestic economy on a competitive basis.

Improved competitiveness alone won't accomplish our foreign trade objectives. America needs improved access for U.S. goods and foreign

markets and improved access and a higher degree of fairness in international competition in those markets.

Title IV of the 1979 Trade Agreements Act deals with fairness in world markets. In the standards area we are well aware of the importance of codes dealing with the government procurement practices.

I've already cited examples of the specious standards which some governments use to favor domestic products over imported goods. Underlining all those other concerns is the need for improved productivity throughout this economy. The growth of productivity is essential to supply the resources for meeting almost every national objective -- yet look at what has been happening:

From 1948 to 1973 output per hour of work in the private business sector increased by some 2.9 percent a year. From 1973 to 1978 the rate of increase was only 0.6 percent a year. The earlier rate doubled output in 24 years. The more recent growth rate, if continued, would take 116 years to double.

As Herb Stein has observed, the earlier rate allowed our generation to have per capita income twice that of our parents but at the more recent rate it would not be until our great-grandchildren were grown up that their per capital income would double our own.

Clearly this prospect is unacceptable, and rightly so, to citizens who are still outside the nation's economic mainstream. Sociologist Amitai Etzioni, a former White House advisor, now at George Washington University, looks more deeply into the social fabric that we weave from one generation to the next. He says that if a society is pre-occupied with non-work and non-productive matters, it doesn't heed the best efforts of management and labor to boost productivity.

On the other hand the society that prizes productive effort and thrift will support those efforts. And when we talk about productivity we are talking about nothing less than the values we teach our young, the values which they in turn bring to the work place and to society at large.

In terms of legislation, we need a stimulative approach to research and development, to patent policies, taxation, and other tools of productivity improvement. But, in addition, we need a policy focus that reinforces balanced growth as a national objective.

If we are here to address every facet of the productivity dilemma, government and the private sector simply must stop being such adversaries. This need for cooperation is self-evident on the standards issue. I mentioned the battles with Congress, with the Federal Trade Commission, circular A-119

giving powers to the Commerce Department over the voluntary standards system and the set of rules that the Commerce Department has put together to regulate the voluntary standards system.

Both OMB and Commerce proclaim their program is voluntary but there is precedent to support the view that government's so-called voluntary programs are more usually no-choice programs. You either play by the government's rules or somehow you don't play at all.

Government without a doubt cannot be excluded from matters negotiated by treaty but better than dominance by either side would be a real partnership in the standards area that could be a model for cooperation. The standards code is only going to be of use to U.S. business when government and business work together in its implementation.

The standards code is a framework. Within that framework, as we develop it, U.S. business is going to have to let the government know when there are violations and the government in turn will have to produce some results when such abuses are encountered.

Richard Goodemote of Sears Roebuck has put his finger on how such a partnership should evolve: As a working relationship develops between the Department of Commerce and the voluntary standards system, he sees the U.S. policy on standards developing the same way it has in other countries, that is, government and the private sector discuss each other's viewpoints and agree upon the approach to be taken by their nation's representatives in international standards meetings or conferences.

The time has passed when the United States can impose either serious or capricious preferences on any increasingly interdependent work economy. Just as a strengthened economy is essential to improved performance in international markets, a thoroughly cooperative approach to domestic standards is a prerequisite to American participation in the international standards of the world community.

There's another rule of human behavior which I have enjoyed and that is the one that says that good judgement comes from experience and experience comes from bad judgement. We've had, obviously, our share of bad judgement in the past. We've gained a lot of experience.

From that, I would trust that working for the national goal of increased competitiveness, internationally; a better standards system, domestically; and a better economic performance in all sectors, that we can gain that happy world of good judgement out of the experience that we put together.

Thank you very much.

MODERATOR SIMPSON: Thank you, Sandy. I wonder if, before I open up the questions or comments from the audience I could ask if either of your colleagues have any comments they would like to make at this time?

MR. UNDERWOOD: First of all, it's been a pleasure for me and I am sure for others in the room to hear some of the principal issues that were discussed yesterday in some detail, to be elevated to the level of national concern.

The tone of national interest was a necessary setting for this meeting and I was delighted to see that we returned to that again this morning. Yesterday one of our speakers indicated several times the philosophy that if it isn't broke, don't fix it.

It does seem to me that there is a great deal of defense going on about what is or isn't broke but the true issues are those addressed this morning: That as a nation we are losing our competitive strength. For those of us who have a technical background and who view standards as a principal tool of technical advancement, then it is impossible to view playing competitively in the international game with diverse, inconsistent, ill-regulated standards.

Let me just suggest also that to those of you who have not been active to any degree, or excessively inactive in the movement to metric in this country, you are in a way, perhaps, not sensing the meaning of that factor in the national future.

Metric is the language of international standards and it must be the language that our technology and our industry uses if it is indeed going to re-establish itself internationally.

Also, I would like to suggest that when we talk about not fixing something, it is important to constantly examine all of our processes to see where they need to improve in terms of the new conditions that exist. We've heard about those conditions.

Let me just ask you if any of you who have hired a new engineering graduate or technical school graduate in the last ten years has met a student who has been exposed to any of the U.S. national standards structures or who is knowledgeable of these excellent standards that are generated in this country.

Let me say as one who has hired an engineer out of a German university and out of other international universities, I have never met one who did not have an excellent foundational background in standards because they view those standards as principal tools of the engineering community.

So I suggest to ANSI and to you who lead the standards movement in this country that introduction of the concept of standards, the basis of standards, the unification principal of standards in the technical educational field should be a principal prerequisite to our future, our technical success internationally as well as nationally.

Finally, in the issue of international trade, we have not heard -- incidentally I thought it was interesting that the first time I heard the word, metric, in a two day conference on international standards was this morning from a person who is not speaking from the engineering community. But, finally, it seems to me that in the international trade areas we have failed to recognize two magnificently golden opportunities.

One, although you may consider it controversial, is the long-range opportunity that exists in trade with the Soviet Union should the political possibilities enable that. This is a mammoth, attractive market and right next to it is another that probably represents one of the finest trade opportunities in the history of man, and that is the newly emerging China.

If we are going to bicker about standards we are going to miss two magnificent opportunities to return this country to its justified status as the industrial leader of the world.

MODERATOR SIMPSON: Larry?

MR. HODGES: Perhaps we want to go on with questions, and if we have time I might make some comments.

MODERATOR SIMPSON: All right. Questions or comments? Everybody did such an excellent job. In the back of you, Howard.

MR. CAMPBELL: Thank you. Ken Campbell from Firestone.

Mr. Trowbridge has raised the level of concern beyond the standards issue to national economy or international trade and has emphasized yesterday's speakers' points of view with respect to what is needed in the way of government-industry cooperation and non-adversary relationships and so forth.

If he would take his memory back just a few short years to when he was on the government's side, perhaps he could bring us some identification as to what the problem is inside government and how we can deal with that in order to eliminate what all of us think is a restriction on our ultimate goals of dealing effectively with international standardization.

What can we do? I mean, here we are.

MR. TROWBRIDGE: My memory is somewhat dimmed by about 15 years of

absence from this city until returning recently but I would guess that part of the problem is on the part of those regulatory agencies that have some legislative mandate from the Congress that they are forced to respond to or that live close to the international scene and see the large degree of standardization in other industrial countries and the rather extensive degree of government intervention in those standards settings and government business collaboration in those standard setting processes and who look at the U.S. system as being, because it is voluntary, somewhat slow and unresponsive in comparison.

I am trying to put myself in their shoes. I am not necessarily saying that their evaluation is correct. But I would guess that the impetus is one of the government representative or official thinking that unless the government does it, nobody else will.

I would propose that the response to that has got to be one of making the voluntary system really work, pulling together the various parts of the community in this country that are concerned with or knowledgeable about the standards system and the need for expeditious development of new standards to meet new requirements.

So the people in government can be headed off at the pass, more or less, by reason of progress on the voluntary side. Now that is easier said than done and I realize that there are many hurdles to be overcome but very often you will find government rushing in to fill a vacuum when it sees that vacuum.

Government officials being very human, enjoy the assumption of power and of obtaining control over policy. This town is based not on the profit motive, as you may have guessed. It is based on the ego motive. The ego motive is really one in which people have satisfaction from having their ideas accepted and their policies put into effect.

As I say, when there is a vacuum, somebody will try and work in and find a way to get control of that space because that is what makes people activists in this town. The best way to head it off is to try and minimize the size and entry way into that vacuum space.

MR. ANDREWS: I'm Syd Andrews, Director of the Division of Standards for the State of Florida but I am here this morning, really, as an officer of ASTM.

The remarks I am going to make now, however, are as a member of the U.S. Metric Board, playing hooky today from the Metric Board meeting because I felt that the metrication aspect of standardization was so important that it was better for me to be here than attending our board meeting and I am here

with the permission of our fine Chairman, Dr. Louis Wolk.

I want to share Gerry's amazement that I have sat here through seven hours of talk about standardization without any mention of the vital aspects of the metric system being adopted in this country. I was pleased to hear Sandy's remarks because it was refreshing to finally hear something positive about metrication.

I sincerely hope the NAM will convey in an extremely positive manner the thoughts expressed by Sandy to the Congress that we must get on with this job of metrication because as he pointed out there are still those in Congress who are trying to repeal the Metric Act of 1975 and there are many who are trying to deny that metrication is in the best interest of this country.

The U.S. Metric Board, because of these actions of members of Congress, has been virtually neutralized as an effective force and unless we get a more positive mandate from Congress, I don't think the U.S. Metric Board can make any significant contribution to the metric movement in this country.

Thank you.

MR. TROWBRIDGE: I would very much agree with that. Metrication is one of those areas of a vacuum that I was talking about a moment ago, in which it seems to me that industry-at-large has got to be much more assertive if it wishes to be more competitive, which indeed it must be internationally.

NAM will push its membership. It does strongly favor it as a policy move toward metrication and the acceleration of it, I think, would be in our national interest. We will do everything we can on the Congressional scene to put that message across.

MODERATOR SIMPSON: Down in front?

MR. BUCKINGHAM: I'm Buck Buckingham, President of the American National Metric Council and I'd like to associate myself with the views of Syd Andrews and the speakers on the platform this morning.

I'd like to state that we are a private, non-profit organization which exists primarily to provide that planning forum and to occupy that vacuum that might otherwise exist. I strongly encourage all of you to find out a little bit more about our organization, our committee structure, and how you might participate as opposed to being a non-participant letting the world slide by.

MS. JAGER: My name is Elizabeth Jager. I work for the ALF/CIO and I would like, first, to make a couple of comments and then to ask a question.

I was particularly struck yesterday and again today with the fact that the perspective of the United States seems to be a very different one in this forum from what we view as the reality. We think the United States is very actively involved in the world and has been for a long time. In fact, if the standards people were working on international standards a hundred years ago, it doesn't sound like a parochial crowd to me.

Also, international trade is an astonishingly large part of our domestic economy and yesterday it was again stated that it was just a tiny percentage of GNP. Depending on how you measure it, any way you measure it, it is a very large part. If you want to take GNP figures, imports alone were about 9 percent, the latest data we have available.

Exports are an increasingly large share of our economy. Consequently if you move to production of goods, which I think has much to do with standards, it is up in the range with imports at 20 to 25 to 30 percent of U.S. products and exports at 28, 29, or 30 percent.

This is a huge share of the domestic economy. Now, that was one fact that I just wanted to mention. The second comment I wanted to make, because I don't think we are a parochial people -- I think we are involved -- what I am concerned about is the continuation of what I think are thirty year old attitudes. There may be 40 or 50 of the United States that are very much involved in the rest of the world. Most of our people are concerned about it.

The farmers in the midwest are talking about selling abroad. We are experiencing import competition or import substitution in virtually every part of this country.

I mention this because it seems to be left out of this conference. The thing that we wanted to bring to the attention of the group, and we had very little success, was the impact of international standardization on the U.S. economy and I am sorry to say that this really isn't being addressed.

It is not that we want to set the economy apart but we do think that in an interdependent world that it should be recognized that we are part of the total scene. My third comment is that I gather yesterday someone said that labor had not been mentioned or hadn't been included in the discussions of the private sector.

I think this is not only unfortunate but I don't think that it is unintentional. I think that as you discuss abstract questions you tend to assume that each part of the problem will fall into place. And I find it surprising that people who are technically competent and who know how important details are, are not paying more attention at this conference to the details of how you work out what you are trying to achieve.

If you don't have effective labor cooperation in this or any other country you are going to have difficulty not only with your standards but with all the other objectives that Mr. Trowbridge talked about.

Now, whether you like what Labor has to say or not, I think it is very unfortunate that it is so conveniently excluded from the dialogue. And, finally, I will get after this discussion to my question, because it is a very serious one and I happen to have great respect for Mr. Trowbridge's ability to pinpoint dicotomous problems. He was at a conference I attended where he pointed out some inconsistencies.

One that I have noted here is the inconsistency between the continued request for federal funding and for federal mandates and the insistence that one must be voluntary and really shouldn't have all this government interference. I find this very hard to put together but the question I have is a far more serious one and that is that in all of the discussions we talk about the U.S. becoming competitive, maintaining competitiveness -- it is always internationally.

If this is, and I think it is, still the world's largest market and we pay no attention even in the analysis of the facts to the in-rush of manufactured product imports, how are we going to address the problem successfully if we leave out the United States when we talk about competition?

We always talk about competition internationally, as if we weren't here. Now, I suspect that this is a hang-over from economics teaching because it is in another part of this book. But I have a feeling that you can explain a way we can get around this because I, for one, find it insupportable that we castigate ourselves for our protectionism and our lack of productivity gains when the people who are involved in making the decisions are really thinking about building operations behind protective walls abroad and leaving this as kind of an open place that nobody talks about.

MR. TROWBRIDGE: I did not mean by any means to restrict the word competitiveness to purely one of export promotion and export activity. I think that in my remarks I included, I meant to, the question of being able to compete at home with a much larger inroad of imports into our own markets.

I very much agree with you that that is part of the need for sharpening up our competitive ability in both directions, exports and the maintenance of market share at home when confronted with very, very skilled exporters who are coming to this market, which is the largest in the world and really the residual free market of the world.

I fully agree with you that there is much that has to be done on both sides when we talk about competitiveness.

MODERATOR SIMPSON: We'll take a comment or question over here and

then have one down in front.

MR. NORRIS: Thank you. I am Jack Norris, U.S. Department of Transportation. I happen to be on the Interagency Committee for Standards Policy chaired by Dr. Forman.

I'd like to bring up an issue here that it is well for us, I think, to deal with the problem that we have confronting the issue of metrication and that certainly is a problem in relation to standardization. But I think that it is also appropriate for us to face up to some other possible problems, particularly under the last speaker's topic. It seems to me to be the best place to bring this out.

There is the question of government-industry cooperation. I have been involved in the standards work since 1968 in both domestic and international standards, not as an official of the bodies but in the working level of the standards committees.

I remember when I first came in government about 15 years ago and the only way, in the area of transportation standards committee, that government was involved was if they couldn't get enough industry representatives to go into the international meetings for attendance, which has happily changed over the years.

I think A-119 is, hopefully, aimed in the direction that type of issue may be resolved. I think the question of government-industry cooperation is kind of a two-edged sword. One is government cooperation on its side and among the agencies and, again, 119 will hopefully help us coordinate positions and assure legitimate and proper government role and support. However, this time next week I will be on my way to an international meeting in Sydney, Australia and frankly we have had difficulty, as head of the U.S. delegation we have had difficulty getting adequate industry support in an area, incidentally, where it deals with containers which is the thing that was originated in the United States and where our U.S. manufacturers are enjoying very little of the market, of manufacturing these containers.

I am talking about transportation intermodal containers where most of these are used in the world and in the United States, to the extent that we use them, are manufactured by foreign companies now and here we find ourselves, myself, having difficulty getting industry support.

I am not here to indict industry. I am simply here to say that it is a two-edged sword and we do have to participate in these things. We do have to make a commitment. The thing that is concerning me now, however, is one that I have talked with Dr. Forman and others on, and that is the item of A-119 and ANSI which is the so-called recognized or cognizant body in terms of ISO reference and the move now that seems to be taking place -- of various

so-called ANSI committees voting to remove themselves from the ANSI and going into other bodies.

I don't know where I stand on this and I do think that there is an issue which others have shared with me as being a legitimate issue that is not yet answered, that perhaps ANSI's position as being the recognized body of ISO from the United States, as the U.S. recognized body, may find their position and therefore the U.S. itself eroded in the international standards arena.

I think this, again, is a question of government-industry cooperation. We were involved in the container standards meeting just last week. I told Dr. Forman of this, this morning, where a vote was imminently to be taken when the item on the agenda was simply a discussion: Should that committee remain in ANSI or should it pull out and go into one of the other prominent standards-making units in the United States.

I was one of the few, having been involved in these other activities that I have mentioned, who raised the question: Well, let's get all sides to the question. Let's get all arguments before we take a vote. I think this is very, a very current issue because I know of one of the other committees with which I am involved that has already voted to remove itself.

I think these kinds of issues are major issues. They are important issues. If we don't put on an impression in the international standards arena that we are well-organized, that government-industry is working together and that our positions are well-developed and that we will attend international meetings, and incidentally this includes subcommittee meetings and it costs money.

Most of the subcommittee meetings -- and this one major committee that I have referred to -- we have had no one attend in the last year and a half. This is not the way to proceed. So, I just want to raise this question and I would appreciate comments, particularly from our most recent speaker, on the focusing of attention of government-industry cooperation.

Thank you.

MR. HODGES: I have restrained myself as long as I can. First, on the question the lady raised earlier, I think that was, well, I think the panel did not address itself to the point she made and I interpreted that as being a general question for the entire conference and primarily to Howard Forman who organized the conference or at least put a lot of work in it, this particular panel, we had a very specific and narrow paper to deal with. I can say, though, that just to assume that participation in international trade automatically reduces jobs in the United States is not the correct conclusion. Our company does business in 157 different countries around the world and we have in excess

of 500 jobs in this country that wouldn't be here if we weren't participating in those markets because those jobs are derived directly and indirectly from that business.

The focus of this conference was to find ways to prevent standards from becoming technical barriers to trade and thereby prevent us from participating in those markets. And I would say right now, we have quite a few jobs that wouldn't be here if our international business wasn't carrying us because the domestic market was killed by two actions of the government.

There are two sides to this question. I do think your main point is that it should be addressed but it was not covered specifically in this particular conference. I think we agree. Most of the consensus is that the adversary relationship between the government and the private sector reached to extremes during the decade of the '60's and the '70's and we have got to find a way to set it aside.

My conclusion is that the awesome responsibility for accomplishing that task falls heavily on the shoulders of the people at this conference and I say that because I think we represent the expertise, we represent the organizations and we represent the resources that must accomplish that task. We have to take advantage of the new opportunities of the national standards policy, the OMB and the GATT code to achieve these objectives.

To those on the private sector side who say: "We can't cooperate with government. We can't let them participate or fund because they will take us over." Or the government side that says: "I can't cooperate and participate with you because you're industry dominated," I would remind you that there are some safeguards in the system.

If they need strengthening, they should be brought out in this conference but if you look first at the issue of funding, I think private sector funding of the standard development activity is not structured in a way where any one company or any one financial source can dominate the system.

Secondly, our procedures are open and due process in establishment of consensus, so they provide safeguards against domination of any one individual, one group, or one sector. At least in my opinion they do.

Then, of course, we have appeals mechanisms. There are discussions underway in OMB and NSP in national standards policy and other as to how to strengthen those safeguards. But there are safeguards that either are or can be built into the system that I think give us the opportunity to do this job.

So somehow or the other I think this group right here has got to find the way to set aside these adversarial relationships and get on with the job of active participation in international standards and to see that they do

not become inadvertently technical barriers to trade that harm our opportunities to participate in broad world markets and provide jobs for ourselves and our people.

MODERATOR SIMPSON: We will take one more comment and then we will break for lunch. I remind you that the session right after lunch is a continuing session. Right after lunch there is a continuing dialogue with respect to all of the subject matter raised. So you haven't lost an opportunity.

DR. PODOLSKY: Mr. Moderator, ladies and gentlemen, several comments have been made here by the last two speakers and by the members of the panel and they relate to things in which I was involved yesterday and which I have been involved in for the last couple of years.

First of all, Gerry Underwood mentioned the enormous trade opportunity with China. Over the past two years I have traveled in China as a lecturer at invitation of the Chinese government. The first year they were on the subject of standardization and this year entirely on the subject of reliability of quality assurance and how to achieve it.

Following each of those lectures, and there were four in each series, there have been questions and answer periods of three to four hours. Of the endless questions, the predominant question in all of these question and answer periods has been: How do you in the United States get the government and private sector to cooperate to achieve a national purpose.

That is the one, overriding subject of interest. It's what they wanted to learn most. How do you organize it? How do you manage it? How do you establish a standards program or a reliability program or quality assurance program and get the government and industry to work together to achieve it for a national purpose.

We have done it in the United States and we have done it voluntarily, we have done it haphazardly. We have achieved, I think, very excellent results. The great missing link has always been a formal mechanism for voluntary cooperation between the federal government and the private sector. There has never been an officially established body which would give each its proper stature and each its proper responsibility and allow the government and the private sector to cooperate toward specific goals in international standardization.

The voluntary sector all by itself, as I said yesterday, has done a magnificent job, in the main, in international standardization for the United States.

We are in a changing climate. We are in a climate that is drastically

changed in the last several years by international laws, by our own national laws. We can no longer go along on the wholly voluntary basis or in a haphazard way. We need a formal mechanism and an established body with specific authority, with specific government input, with specific voluntary sector input, in a friendly and cooperative way.

Yesterday I presented a report of a working group on a proposal for such a body. I believe that that requires the most serious attention from everybody here. The only way we are going to achieve what we really have to achieve in international standardization is by such an effective body with proper government sector input working toward the national goals that are important for international trade.

MODERATOR SIMPSON: Let's just take a quick check. We are scheduled, well, I am going to thank these speakers and we will go on either to the next speakers or a coffee break which is not scheduled until a little later, but I am going to see if it is set up, while these speakers are excused. Thank you very much gentlemen.

(Applause.)

We'll adjourn now for a half hour coffee break.

(Whereupon a coffee break was taken.)

MODERATOR SIMPSON: In this next section of our program we will be hearing presentations from two officials from the government and then a discussion period will follow both of the presentations and it will be a combined discussion period, as has been indicated on the program.

The first presenter will be Dr. O'Connell. The title of his paper is: Establishment and Problems of U.S. Department of Agriculture's Technical Office Under Title IV of the Trade Act of 1979. Dr. O'Connell?

ESTABLISHMENT AND PROBLEMS OF U.S. DEPARTMENT OF AGRICULTURE'S TECHNICAL OFFICE UNDER TITLE IV OF TRADE AGREEMENT ACT OF 1979

Presented by: DR. THOMAS B. O'CONNELL

DR. O'CONNELL: Thank you. First, I would like to thank all the people involved in setting up this seminar for providing us with the opportunity to speak to you. Agriculture, which I am here to represent, seems not to have engendered as wide concern by a number of private sector officials in the matter of standards but I assure you that the interest is there.

The Toyko round of the multilateral trade negotiations, established

for the broad purpose of enhancing the growth and maintenance of an open system for world trade, included about 85 countries including all our major trading partners and many of our minor ones.

It ended its roughly five years of sometimes frantic sessions in mid-1979. The U.S. put together what we saw as our obligations as participants in these negotiations and as a signatory to the agreements, also referred to as codes of conduct, resulting from these negotiations.

The result of that exercise is the Trade Agreements Act of 1979, as you all know I am sure, and the parallel statements of administrative action implementing the Act.

Title IV of the Act is devoted to consideration of our obligations under the agreement on technical barriers to trade, otherwise known as the standards code, as you all know, also.

Title IV requires among other things that the Departments of Commerce and Agriculture each establish a technical office. The purpose of these offices is to assist their technical agencies and state, local, and private sector organizations in taking full advantage of the opportunities provided by the standards code.

A Secretary's Memorandum, establishing the U.S. Department of Agriculture's technical office in the Foreign Agricultural Service, which I will refer to as FAS, was published on June 9, 1980. The substance of the Secretary's Memorandum is taken largely from Title IV of the Act and the administrative provisions.

Agriculture's technical office is small. That's why I wasn't here yesterday and why I will have to leave early today. In order to carry out our functions properly we must enlist the assistance and cooperation of technical agencies such as the Animal and Plant Inspection Service, otherwise known as APHIS; the Food Safety and Quality Service, and the Office of Transportation, among other agencies within the Department of Agriculture.

In addition, insofar as their duties concern agricultural commodities, we have also arranged to call on the appropriate offices in the Environmental Protection Agency and the Food and Drug Administration.

The complete list of these agencies is provided in the Secretary's Memorandum and the subject matter is extremely broad. We have defined some of our initial objectives under the standards code about which we will seek advice from these agencies, roughly as follows:

First, to select proposed U.S. standards for notification to foreign signatories of the standards code and based on such criteria as trade

significance among signatory countries, mandatory versus voluntary standards and identification of those foreign countries which are affected.

We must then notify the National Bureau of Standards, designated as the inquiry point for these purposes, as quickly as possible in order to provide signatory countries with maximum time for comment.

Then, two, we must identify the significance of foreign proposals regarding U.S. trade. That is, will there be any impact at all on U.S. trade and if so, on whom and to whom should a given notification go in the private sector, if that is appropriate or to the State Departments of Agriculture if that's appropriate, or to other groups. Again there is the need for promptness as required by the extent of the comment period that must be recognized.

Three, we must list organizations and individuals in the state and local agencies and especially those in the private sector that may be able to help in standards-related or certification-related functions. With this objective in mind we have established contact with the National Association of State Departments of Agriculture here in Washington to advise us on state and perhaps local agencies for particular situations.

In the private sector we will look for help from ANSI, of course, in addition to the U.S.D.A. technical agencies, the FAS commodity divisions and members of the joint U.S. trade representative and USDA advisory committees on trade. And most of these people represent commodity associations.

Fourth, we must assist the National Bureau of Standards in determining with minimal ambiguity which foreign proposals should be provided to Agriculture and which to Commerce. We must also identify U.S. standards and certification-related proposals as soon as they are approved for publication so that foreign signatories will have sufficient time in which to register comments.

Fifth, we must help the U.S. trade representative build a list of qualified experts willing and able to serve on technical panels in cases coming before the GATT committee on standards. These experts may be called upon by USTR to assist in examining disputes to which the U.S. is not a party. They may come from government or from industry. Our original intention to build up such a list has been somewhat altered to the more realistic one of addressing issues as they arise and seeking experts on the basis of the requirements of the specific subject matters involved. We will seek those experts from within government and outside government.

The standards code is new and complex. We expect that the GATT standards committee will be an extremely busy group and not the least of its activities at this stage will be the basic one of determining exactly what is and what is not covered by the code.

A case in point involves the export of U.S. poultry to the EC. The EC Council some months ago passed a directive specifying among other things the manner in which poultry for export to the EC member states must be chilled between slaughter and final packaging for shipment.

No requirements were established regarding the characteristics such as microbial level of the final product. Thus these specifications are unrelated to any direct measurement of quality of final product, rather they pertain solely to methods used in the processing sequence before becoming the final product. They are, nonetheless, presented as mandatory standards and countries wishing to sell poultry to those EC countries which have adopted the EC directives and enforce them to the letter, must conform.

Standards of the type described above have become known as processes and production methods or standards on processes and production methods and would seem to contravene such standards code provisions as that stated in article 2.1 in which it is stated "Parties shall likewise ensure that neither technical regulations and standards themselves nor their applications have the effect of creating unnecessary obstacles to international trade." The word "unnecessary" is the key word in that statement as I understand it.

In the case cited above, strict enforcement of the provisions of the EC directive by a member state was announced. The U.S. had very few poultry processing plants equipped to comply with the EC directive and we believed we were on relatively secure ground in challenging this step under the dispute settlement provisions of the code, particularly article 14.25 in which it says that the dispute settlement mechanisms of the code may be used: "...where a party considers that obligations under this agreement are being circumvented by the drafting of requirements in terms of processes and production methods rather than in terms of the characteristics of the product."

The EC member state in question, with the support of course of all the other EC member states and the EC itself, plus Japan, plus the Nordic countries, countered by declaring that it was their opinion that code article 14.25 did not cover such situations unless intent to circumvent their obligations could be proved. A very difficult thing to prove.

Thus, our grounds are not as secure as we had hoped and the matter remains before the GATT secretariat and the standards committee for eventual reconsideration and decisions as to whether 14.25 does indeed cover disputes centering on processes and production methods rather than on final products.

I would like to close by pointing out some of the advantages we and you may be expected to gain through our having become signatories to the standards code. Above all, in my opinion, will be the advantage of receiving notifications regarding foreign standards related to regulations before they

become final laws, with sufficient time for us at the federal, state, and private sector levels, to provide comment.

The mechanism for this type of system has not yet been fully implemented by all signatory countries. In order for such a system to work properly and effectively, each participating country must have, as a minimum, an accessible, regularly published document in which such proposals may be found, such as the Federal Register in our case.

They must have a central inquiry point at which a complete collection of all U.S. foreign proposals and regulations of a standards-related nature may be found, such as our National Bureau of Standards.

In addition, offices roughly analogous to those of our U.S. trade representative and to our technical offices may be beneficial but these refinements are left up to the discretion of each signatory as best fits its own needs.

At this moment the U.S. seems to be considerably ahead of most other signatories in a number of respects, such as designating the offices mentioned above and notifying other countries of proposed U.S. regulations. Another important area in which we stand to profit by becoming a signatory to the code will be our gaining access to foreign certification systems and marks.

Such access will greatly facilitate the acceptance of our goods and commodities by foreign markets. Other such areas include, among other things, the alleviation of unnecessarily restrictive standards-related activities and also the acceptance of our test results on a non-discriminatory basis and, hopefully, an effective dispute settlement mechanism.

There are still areas in which the roles of the U.S. agencies, such as the U.S. Trade Representative, the State Department, the National Bureau of Standards, and the two technical offices must be refined. We are convinced, however, that this will be done in the course of time and look forward optimistically toward a smoothly operating and mutually beneficial operation under the standards code.

We look forward also to building closer and closer ties with you people in the private sector.

Thank you, very much. (Applause.)

MODERATOR SIMPSON: Thank you, Dr. O'Connell. Our next speaker is Bill Randolph. The title of his paper is: "Voluntary Standards: Problems and Promise."

VOLUNTARY STANDARDS AND FEDERAL REGULATIONS: PROBLEMS AND PROMISE

Presentation by: HENRY E. THOMAS AND WILLIAM F. RANDOLPH

MR. RANDOLPH: Hank Thomas and I had agreed to cooperate in preparing a paper. At that time the Food and Drug Administration was not aware of something called "toxic shock syndrome" which has since overtaken us. So, since Hank was going to be out of the country, we agreed to a fifty-fifty split -- he'd prepare the paper and I'd deliver it for him. I'd also told Howard Forman that I'd make a few general comments from my own personal perspective, not only at Food and Drug, but as a member of the Interagency Committee on Standards Policy.

Howard is well-aware that I generally wear the black hat at the interagency committee meetings, together with FTC and a couple of others. However, I'll surprise Howard by saying that I have come to realize that, personally, I think the voluntary standards system that we have is working, works well, and may be in need of some improvement.

One of the main concerns that I have is funding, particularly for international travel. We have found at Food and Drug that it helped if you are in the forefront and have already developed your standards so that when the time comes to develop international standards, they tend to follow what you've done.

When you are faced with a situation where standards are being developed at the national and international level at the same time, as we are faced with today in the medical device area, there is concern that we have sufficient funding and personnel to participate actively in the international arena. To date we have been able to do that and we've been sending representatives from the agency to the international standards working groups on devices.

I feel our cooperation with these voluntary standards groups has been excellent and I am very pleased.

I am sorry that Sandy Trowbridge had to leave early because in his comments he said that Washington bureaucrats are dealing only in ego and not in profit. Well, if you read my bio there is a little cryptic phrase that states that I was Director of Operations for the U.S. Army Europe Class VI Agency. Everyone asks: What is a Class VI Agency?

I don't know how they got the title. Class III is petroleum products in the military. Class VI is the alcoholic beverage sales. We were a profit-making operation and used to make \$2.5 million profit a year. Not only that but I was able to sell scotch at the equivalent of \$1.80 a fifth, which included a 75 percent mark-up over my landed costs. So the government can operate at a profit but it helps if you have a monopoly and no taxes. (General laughter.)

Somebody made a statement yesterday that on the program we had outstanding expertise on standards. It made me shudder a little bit because I'm not an expert on standards. I didn't know what I was doing here. I thought I was here because Howard wanted another Philadelphian on the panel.

Dick Simpson mentioned yesterday a story that wound up about the Book of Martyrs. It reminded me of the man who managed to survive the famous Johnstown flood back in the '20's and he spent the rest of his life, every time he got more than two people together, recounting the saga of the Johnstown flood.

Eventually he died, arrived at heaven and St. Peter said: You know, when you first get here we have decided we'll grant any one wish you want to make and what would be your desire? He said: Well, that's easy. Would you just get everybody together here in heaven so I can tell them my story about the Johnstown flood? Peter said: I don't think that's a good idea. Don't you have a second choice? And he said: No, that's what I want to do. I'm going to tell them my story about the Johnstown flood and really impress them.

St. Peter said: Okay, I'll do it but I just want to warn you that Noah's going to be in the audience. (General laughter.)

I've signed a lot of documents that contained reference to standards. I early-on at Food and Drug found it was a lot easier to cite an ASTM or other voluntary standard than to try to write something out ourselves. Our policy to this effect was formally established early in the '70's and it encourages participation of our employees in outside standards-making activities. We decided we did not want to reinvent the wheel.

We recently published proposals in the device area and, faced with a Congressional mandate to develop a great many standards for medical devices, expressed our wish to utilize voluntary standards to the maximum extent possible via mechanism of endorsing those that we felt were adequate. We were sure everybody in the standards' area thought that was marvelous and we were complying with the spirit of the OMB circular. However, once again the legal profession geared up and we have had legal objections filed with us by one of the trade associations stating that what we proposed doesn't provide due process. The agency is considering those objections now and I hope will come up with a good resolution.

At this conference there were a lot of comments: "If it ain't broke don't fix it." I agree and would like to add that in the medical area one of the rules is, first of all, "do no harm" to the patient. I think there is room for improvement. The OMB circular goes a long way in trying to resolve some of the concerns that have been expressed in the past, but I do feel that the voluntary standards community here in this country has done an excellent job and can continue to do so.

Now I'd like to read Hank Thomas' paper. Hank's in Europe today at an intergovernmental standards conference of which he is chairman, otherwise you could be sure he would like to be here in person.

We've come a long way, a very long way. Looking back just two years ago one would have thought the voluntary standards system and the federal government were engaged in a battle from which only one would emerge. But that battle has turned, if not into a lovefeast, at least into a 'let's get on with the job' attitude on the part of both.

The Office of Management and Budget has issued instructions to the Executive branch of the government clarifying for the first time the role and responsibility of the participation of federal personnel in the voluntary standards process. It has also opened the way for active support of the voluntary sector by departments and agencies.

By the same token we now have the National Policy on Standards. This is truly a monumental piece of work. It is a landmark in that it sets forth the most fundamental policy for all participants in the voluntary standards area. It places some heavy burdens on standards managers and audit and accreditation groups, if it is to be paid more than glancing attention, more than just lip service.

These two documents establish a new relationship between government and the private standard sector; relationship not yet fully understood by many who are in the 'pits' grinding out the standards. There is considerable education yet to be done to bring to all of the participants' attention the philosophies and policies inherent in the OMB Circular A-119 and the National Standards Policy.

Given the foregoing, the time is clearly ripe for the implementation of these new and most substantive responsibilities which have been placed on the voluntary standards sector and on the federal government by the enactment of the Trade Agreements Act of 1979.

There will be some rocks and shoals to be navigated in our joint endeavors to comply with this new national and international responsibility which we in the government share with the private standards sector, but there can be little doubt that we will make the passage successfully. We have, therefore, from our immediate past experience, some promise as to the future. There are, however, some trouble spots ahead which we should be mindful of.

The provisions of the technical barriers to trade section of the amendments to the GATT, although placing responsibilities on governments to use relevant international standards, where they exist, also has extensive exceptions to this rule. This is particularly important to those in the

federal government who are charged with protecting the public health, safety, and environment: for example, where the government acts largely through the medium of product regulations. The exceptions are such that, absent goodwill and serious intent to comply not only with the letter but with the spirit of the new responsibilities, federal regulatory officials may not change their actions greatly in the future from the manner in which they have dealt with standards in the past. I don't think I need to elaborate on this point.

There are two matters which appear to need very near-term resolution, however, if we are to proceed: federal regulatory agencies in the voluntary standards process must proceed together successfully into the international arena pursuant to the GATT requirements.

First, we will need to rethink how we communicate with our international colleagues in the international standards activities field. If the standards being developed by the international voluntary standards sector are known to be intended for government's subsequent regulatory usage, clearly the governments likely to be concerned must be active participants on, and with, the entire voluntary standards process.

If they are not, the voluntary sector is likely to have a perhaps insurmountable selling job to do to get the governments to adopt the standards they have developed or, more likely, the standards will be modified by the governments concerned and the international harmonization we have sought through the GATT will be a nullity.

The voluntary standards sector cannot for its part, therefore, sit and wait on the federal government's participation. It must aggressively seek it out! The OMB Circular makes that task much less formidable now than before its issuance.

Further, the voluntary sector must devise a mechanism by which governments can speak to governments through the medium of the international voluntary standards process. This is not as easy as it sounds. For example, most national standards bodies go to the international standards arena with a single national position.

If we in the United States cannot agree in our domestic standards development and review process on a standard acceptable to both government regulators and the private sector participants, what do we send to our international colleagues as the U.S. position? Or, since we like to work by consensus (but not necessarily unanimity), what if all but the government sector agree on a standard? In such a case it would seem that this "minority" view must be transmitted to the international standards participants so that they may recognize, up front, that there might well be a serious problem in the U.S. government adopting a standard that it does not agree with, but

that might otherwise be agreed upon by the voluntary standards process and supported by the "U.S. position."

We need, of course, similar information as to whether other governments -- not just their voluntary standards organization representation -- are in agreement with that position in whole or in part. There is no reason why this kind of communication mechanism cannot be worked into the standards system, but it will need to be done internationally, not just for the U.S. This, of course, applies only to those topics where government responsibilities are involved and the standard is likely to be adopted for regulatory use.

Second, there is the problem of money. This problem never seems to go away. Specifically the problem is travel money. From a purely parochial prospective for Americans, a great deal of the international standards work is done in Europe. Participation by U.S. representatives to the technical committees developing standards cannot be left solely to those who happen to be employed by, shall I say, enlightened or at least well-heeled organizations.

We in the federal sector, I assure you, look critically at our international travel budgets, and they are very, very small. This travel funding situation must be altered. The best qualified person to represent the U.S. view must be the U.S. representative, and the lack of travel funds for that person should not leave the task to his less qualified but well-funded colleague.

If the standard being developed, likewise, is anticipated to be used in government regulations, it may be imperative to have a spokesperson for the government actively participating in the work of the international standards team. At present resource levels I suspect that you will find very little change in government participation, if that participation necessitates international travel.

Government representatives of course, would not need to be present at all international standards working group meetings. We would presume that appropriate caucuses and instructions, written if need be, can be given to the U.S. delegate and the government can thereby be assured that its position will be clearly and well delivered -- perhaps even if the U.S. delegate is not in personal accord with that position.

If we are to work together, successfully, in this new endeavor, such a philosophical but pragmatic twist as this could become common place. These are a couple of observations on problems which several federal regulatory officials have perceived to full and successful implementation of the government voluntary standards process partnership when it comes to the standards for adoption in regulations.

The problems are certainly surmountable, and I am confident that they, like other problems and issues addressed at this meeting, will be resolved to our mutual benefit -- if not complete mutual satisfaction. (Applause.)

MODERATOR SIMPSON: Thank you, Bill. And also our thanks to your missing colleague, Hank Thomas.

The floor is now open to questions to our two government representatives and/or comments. Down in front here, Don, and then we will go over there.

DR. PODOLSKY: I have no question but a comment on Dr. O'Connell's very interesting paper.

In May of this year I attended as a member of the U.S. delegation to the Pacific Area Standards Congress, the meeting held in Hongkong. Knowing nothing myself about agriculture, I was very interested and rather surprised to find the very high interest among the 16 Pacific rim countries that were represented in the Pacific Area Standards Congress on standards for agricultural products and the problems that were presented and discussed there in relation thereto.

The upshot was that Australia and the United States were asked to jointly chair a special conference to be held on standards for agricultural purposes and the purpose of my present comment is simply to call attention to the fact that that meeting is being organized. I understand it's to be held in Hawaii in the late spring of next year. Donald Peyton of ANSI is the U.S. participant in the organization of that Congress and his parallel, the director of the Australian Standards Institution, Mr. John Paton, is the co-organizer of that conference.

Simply, to repeat, there seems to be a tremendous need for standards and a very broad spectrum of problems in standards for agricultural products world-wide. The Pacific rim countries seem to have special problems that are going to be addressed in that conference.

MODERATOR SIMPSON: We have a comment down front.

MR. GROBIN: Allen Grobin, IBM Corporation. I speak now from my experiences as a representative of ISO, TC-107. I'd like to add this comment to the inadequate travel budgets for travel to ISO comment: The government representatives also have inadequate expense accounts.

I think you'll find that at the ISO meetings much of the discussion that leads to effective conciliatory agreement and understanding, compromise, takes place after the meeting proper. At dinners and things of that sort.

I know my colleague from the National Bureau of Standards has difficulty in this respect. I believe on one occasion he had 42 cents a day left over from his hotel bill to pay for meals. I think the government has to properly fund their representatives when they send them.

MODERATOR SIMPSON: Howard, another question in the back. While you're moving back I might just make the comment that this first meeting I went to, the ECE meeting a number of years ago in the '70's as a government official, there was a western caucus where the western national got together prior to the meeting to see if there was anything of interest that they should discuss among each other.

I remember getting the tab for the bill, for the dinner, and I thought it was routine, you know, that the government picked that up, but it cost me a couple hundred dollars out of my pocket, that one event.

MR. DIES: I'm Douglas Dies, Executive Secretary to the American Council of Independent Laboratories. I am also the Assistant to the President for the National Institute of Oil Seed Products.

We have a problem wherein the oil seed industry -- the NIOF is the organization that writes the trading rules for international trade, particularly on imports of coconut oil and palm oil and the world pretty much uses those trading rules. There is an oil seed called rape seed that is produced in Canada and in northern Europe and it's used in margarine and in salad oils in those countries. We do not produce any in this country for edible purposes. We can't import any from Canada for edible purposes because Food and Drug has declared that so many parts per billion exist which are not suitable for food uses.

The rest of the world accepts that. We can't use it in this country because of Food and Drug rules. I wonder if you have any idea of how that can be reconciled, how our government can accept the general accreditation throughout the world of that as a food product. Is there any way that this or a group can think of some way for us to accept in this country something that is accepted throughout the world?

MR. RANDOLPH: I think the problem here is we have to live within the statutory constraints that Congress has imposed on us. In this case, our scientific experts at the Bureau of Foods have concluded that the rape seed oil presents safety problems that need to be overcome.

This is very much a technical issue. I know there has been a great deal of communication back and forth between the industry and the Bureau and I'd just end up with foot and mouth disease if I tried to recall what the specific toxicology problems are but I know that that has been an ongoing issue for some length of time.

I think the concept of international standards does not require us to say that if a product is accepted for use in several countries that it automatically follows that it has to be accepted everywhere else because there are different cultural, different legislative mandates and the laws in our country are in many instances much stronger than in other countries throughout the world. We have to follow what Congress told us to do.

MODERATOR SIMPSON: Yes, Howard, behind you. On that side.

MR. SAUNDERS: Greg Saunders from the Department of Defense. Perhaps it is unfair to ask you this question but I think it needs to be raised sometime during this conference. The discussion has been centered, to a large extent, around improving overseas commerce. In the Department of Defense we are concerned about another issue of international standards and that is the transfer of critical technology.

The Department of Defense has a book some two inches thick which lists critical technologies that should not be discussed with Warsaw Pact nations. I just wonder what mechanisms are in place or perhaps should be in place to control the transfer of critical technologies. That is one of the things that we lean very heavily on for our superiority, if we have one, over the Warsaw Pact nations.

MODERATOR SIMPSON: Anybody like to make a comment or a response? It could be either from here or someone on the floor could respond to that. Bill?

MR. RANDOLPH: Greg, we just trust that in the Food and Drug arena we don't have any technology that would fall within the purview of your doorstopper but again this illustrates a need for communication and coordination within the government sector so we don't go off in 180 degrees from each other and possibly through the Interagency Committee on Standards Policy, or through the Office of the U.S. Trade Representative or through the Departments of Agriculture that could be coordinated.

I'd also say that I recall a couple of years ago our international subcommittee visited ANSI and I asked Sava Sherr: What was the shortfall on ANSI's international travel budget? He said: As I recall that, it was about \$250,000. I thought: My God, for the cost of one Air Force heat-seeking missile we could solve the whole problem and ANSI wouldn't have to go through this user fee situation.

I have frequently suggested to Howard that Commerce make a sizeable grant to ANSI to pick up the deficit and he always comes back and says: Why don't you pick it up at FDA?

DR. O'CONNELL: If I may comment briefly on that also?

MODERATOR SIMPSON: Yes, please.

DR. O'CONNELL: I have been involved from time to time in sessions of quite a number of international committees. Perhaps this sort of thing relates to what you are talking about.

The committees that come to mind are some of the Codex committees, particularly those on pesticide residues and on food additives, in which the question of the use or misuse of proprietary information has become such an important issue that in every case I know of these committees have chosen to set up subcommittees that meet at every session and discuss this very issue.

Our National Agricultural Chemical Association is heavily involved in that sort of thing and apart from that I don't know of any federal regulations that are really set up to protect us against this.

MR. RANDOLPH: The Federal Food and Drug and Cosmetic Act says we can go to jail if we release any trade secret information.

DR. O'CONNELL: Little things like that, right.

MODERATOR SIMPSON: We have a comment down in front and then we will go back up this way. Is there anybody else who would like to comment on that subject before we switch off? Yes, we have two people who would like to comment. Right here, and then we will go on back.

MR. SCHOCK: Harvey Schock, speaking for myself. Isn't that one of the reasons we have performance standards rather than descriptive design limitation standards that get into process details, to avoid just the problem that's been mentioned by Greg here?

There are, of course, constraints that are handled by various committees under Commerce and so forth, on specific technical areas on the exporting of information.

MODERATOR SIMPSON: Thank you. We have a comment in the back on that same subject.

MR. HODGES: Larry Hodges again. I cannot quote directly from the vast number of policies that ISO has but I do believe that somewhere in the policy structure of ISO there are some policy statements that try to keep them from embarking on the sensitive areas and developing standards that might achieve the technology transfer that you are concerned with.

My other suggestion is that the standards developments that go on in ISO and IEC are not matters of secrecy. It's easy enough for anyone to find out what projects are active and they are deliberate, long drawnout processes

and so all you have to do is look at what they are doing and if you think they are moving into a sensitive area you raise the red flag.

MODERATOR SIMPSON: Thank you.

We have another question down here. While Don is delivering the microphone I am going to apologize in advance for again stepping out of the role of a moderator but just as a comment on the question about: What do you do when there is a federal regulation that is inconsistent with the rest of the world?

Just in a mechanical proposition the GATT standards code contemplates that and it contemplates the possibility that the reason the standard is different than the rest of the world is because the country chooses to provide a higher level of protection and it also contemplates the possibility that the country is doing it as an artificial or unnecessary barrier to trade.

It contemplates both situations. If you believe a situation exists where a country has set a level different from the rest of the world and you believe it is a tool of commercial policy and it's artificially disguised a health and safety regulation, then a country can complain that there is a violation of the code and there is a complaint mechanism built into the GATT standards code to try to resolve that. It's just a mechanical way of how you would proceed.

MR. NORRIS: Jack Norris, U.S. Department of Transportation.

Mr. Chairman, I would like to refer to the important Attendees Note, something to the effect that a principal object of this conference is to commence the development of data base, so forth and so on. And then we talk about the strengths and weaknesses of the United States participation in international standardization.

Now, Bill has certainly dealt with a very interesting subject, to all of us, as each of these has been, but I would particularly suggest that we might even need to talk about the subject of voluntary standards and international conventions.

The reason for this is that our experience in the area, at least in the area that I work in, in package standards, domestic and international; pallet standards, domestic and international; and other transportation standards including containerization, we are finding -- and these are becoming trade barriers as well -- the techniques are being used in many nations of the world and groups of nations, for example, the EEC groups, that through the device of the United Nations and through the device of groups of these nations' standards that were not obtainable through the voluntary organization such as ISO suddenly surface as the case may be in these official intergovernmental arenas.

I think this is worthy of note and perhaps some consideration in the aftermath of this conference it's also a matter of importance from the point of view of government-industry cooperation because here again while in the official intergovernmental arena the spokesmen usually are officials -- that is government employees or official representatives of government -- they are in very serious need of industry support and input in the preparation of those meetings.

I think what we are doing as we see the conference, and I am sorry I was not here yesterday, but we are bringing out these various facets that co-mingle with each other in daily practice and the rituals in international standards are coming out before all of us and I believe this is going to give us all a better perspective.

Thank you.

MODERATOR SIMPSON: Other comments and/or questions for the speakers? If not, gentlemen, thank you very much. We appreciate it.

(Applause.)

MODERATOR SIMPSON: Our next subject matter is an interesting one, to be presented by Bob Peach, supported by Al Wilson. The subject is product certification and its potential impact upon international trade.

Gentlemen, would you come up, please? Feel free to either use the podium or sit, as you choose.

PRODUCT CERTIFICATION AND ITS POTENTIAL IMPACT UPON INTERNATIONAL TRADE

Presentation by: ROBERT W. PEACH AND ALLEN M. WILSON

MR. PEACH: Thank you, Mr. Simpson. I want to thank Dr. Forman for inviting me to speak. I'm not too sure about my assignments as the last time slot before lunch but I am glad to be here in any case.

I want to thank Al Wilson for the help and the input he has provided in our paper today.

Slowly but inexorably the building blocks of international product certification are falling into place. The concept of product certification has gone from dream to theory to discussion and now it is at the stage where most if not all elements of international product certification have been identified.

At last we are at the stage of products and projects, not theory and

concept. Now, this conference could be regarded as an encouraging step along the way towards implementation of these much-discussed theories.

Now, today I will attempt to provide an objective analysis of the elements of an effective international certification system. Because of the wide variety of opinions about what certification is, we'll consider basic definitions and objectives. Now, this is really an extremely basic paper, prepared so that it will be in the proceedings to try to collect the various observations in one place. So you industry professionals that are here, bear with me as I cover this.

Incidentally, all in one place is a booklet put out this year by CERTICO (the ISO certification body) that is available through ANSI. I've a copy of this up here. (I am going to watch it -- it is \$20.00.) Don't panic, that's 12 cents a page, and many of those pages are worth much more than that.

You can review it. It has the seven or eight guide documents that have been published in the ten year or so life of CERTICO. They are all in here. This is really an update of the work of CERTICO thus far, and if you want a copy of it, you write a check out to ANSI. Call it \$20.00. Get it to Bill Rockwell today. He's here and he will see that it gets to you. Your name and address and make out a check to ANSI.

\$20.00. Take a look at this and see it; it is worth it. It's 12 cents a page. And that will cover much more in detail than I could possibly cover either here or in the proceedings. It's worthwhile for those who are serious in understanding what certification is about.

Product certification means different things to different people but the underlying driving force of the attention to certification is that purchasers (whether individual consumers or mass purchasers such as retailers or manufacturers purchasing component parts or materials) want assurance that the product actually received is what they had in mind when it was contracted for, and conforms to appropriate voluntary standards and applicable mandatory standards set by regulatory bodies.

Conversely, manufacturers are typically desirous of a system by which potential purchasers will have the assurance that the product they receive is what they expect. Certification is generally regarded as a "formal" process, yet formal certification schemes (whether national or international) are one, but only one, of many means by which the needs for assurance of quality may be met.

Now the large manufacturer may communicate to the ultimate customer the assurance of product quality through brand identification. Having built up a quality reputation in the market place, such manufacturers have a strong incentive to maintain quality integrity that is historically experienced by customers.

Out of such needs for product quality information and assurance, a variety of plans have evolved. Many of these arrangements do not fall under a strict definition of product certification, yet attempt to serve the same purpose with varying degrees of effectiveness.

There is one common characteristic that deserves emphasis: Certification schemes, when established, are certain not to run automatically. Successful system operation requires careful attention by all parties, with guidance, administrative and periodic review by professionally qualified personnel.

Now the term, certification, is defined somewhat differently by various standards bodies. (Now we are about ready for a slide or two.)

Now, this is a definition of certification that appears in ISO guide 2. That's in the booklet that you will purchase through Bill Rockwell. We have in there a definition, 2.28, that's fourth down, for a certification system. "A system having its own rules of procedure and management for carrying out conformity certification." Now, that is the ISO definition of certification.

Next slide, please. Now, here is an ANSI/ASQC definition in a booklet on quality systems terminology, 3.3., certification, "the procedure and action by a duly authorized body of determining, verifying, and attesting in writing to the qualifications of personnel, processes, procedures, or items in accordance with applicable requirements." (Now, we'll of course have that in the proceedings, so copy it all down if you need it.)

Now, the third one. There is also a definition, an ANSI definition, out of the Z-39.2 standards which has been revised this year: Certification. "The procedure by which a product or service becomes certified." Dick Simpson, I think that came from the same folks that defined "Moderator." (General chuckles.) "Procedure by which a product or service becomes certified." Incidentally, that is an intentionally broad definition."

My point is that even in the groups that are taking the posture of defining certification, the words don't come out the same. But combining all of these definitions, we can say that product certification is defined as a procedure or system having its own rules of operation and management, intended to provide conformity to a specific standard by a duly authorized body, governmental or non-governmental, with an affirmative indication attested to in writing by a signed document or by mark of conformity.

Formal certification requires a decision as to the characteristics to be certified, defined standards for each characteristic and a test or inspection method for determining whether individual product conforms to the defined standards. This, in turn, requires assurance that the laboratories

or inspection services providing product evaluation be technically qualified to conduct such a service, so that reports or product quality are accurate.

We've never heard it proposed that formal product certification take the place of existing buyer-seller arrangements that are working economically and provide a high quality product. Rather, a variety of certification schemes are needed to provide cost and quality assurance benefits for products and industries where there is a need for improvement, as well as in cases where regulatory bodies require such certification.

One element of certification is that each manufactured item from qualifying producers bear an easily recognizable mark to assure purchasers that the following steps have been taken in their interest: The product concerned is the object of a standards writing program; the "stream of commerce" utilizes these methods of test and evaluation to generate products supported by an effective quality assurance system; that laboratories of professional competence and integrity have been accredited; that an appropriate system assures that conformance to design is adequate, and; the use of a mark would be monitored and controlled under a formal system.

Now, certification plans exist in various forms, in many countries. Five or six years ago, Dr. Frank LaQue made inquiries to a number of ISO member countries as to the nature of their certification activities.

Not long afterwards a South Asia Regional Conference was held in Singapore with proceedings published under the title "Testing and Certification for Export Products in Industrialized Countries." Our review of the reports of the 18 countries contained in these reports shows that while most have a quality mark system under a government operated plan, a wide variety exists in methods of operation and products covered under the plans.

Most countries have national testing laboratories but many also certify non-governmental labs to conduct tests. Not all quality marked programs are mandatory on all products. Some permit voluntary participation. Many programs emphasize type testing while others set comprehensive inspection requirements for each shipment of exported products.

I have a slide of some of the charting we attempted from this mass of information about certification programs and others. Now, this chart you aren't going to be able to read, but what we have listed for the 18 countries down the left side are the nature of their program.

Now, to read this a little better I have a second slide with a part of this, so if you will put that on, it will help us a little bit to read. We have listed down the left side various countries, identified their standards organization and how they are developed.

For instance, we have developed under Japan the technical committees under AIST, the Agency of Industrial Science and Technology and under JISC, Standards Council, all of these under MITI. Now, we have identified those where the standards are voluntary, or where they are mandatory. In most cases they permit a voluntary system, where it is voluntary by the manufacturer as to whether he wants that mark; but after he has made that decision, then the rules are mandatory. That's what that type of standard column means; and then whether the testing laboratories are governmental, independent, or under manufacturers.

Then there is the type of product testing and so on. That's enough on that. I won't go through the detail but we have sorted this out, or attempted to, and that's it for awhile.

With the international attention to product certification brought about by the GATT Title IV provisions, the time may be right for an update survey of the status of existing certification plans worldwide. Now, updating these reports really would be a primary concern of ISO-CERTICO, which is the mechanism for developing a register of certification plans, and it would seem worthwhile to consider at this particular time.

I will present this thought to CERTICO at their next meeting, as to whether this isn't the time that they should try this, without going off the cliff on trying to develop too much information, but to get some feel for the state of product certification internationally.

Now, in the United States a number of certification schemes are cropping up as a result of the requirements of U.S. regulatory agencies, that not only establish product quality requirements but invoke quality system requirements as well.

Recognizing that certification schemes vary in scope and nature, these programs make use of many of the elements of certification. Some of those that have come to my attention include the FDA programs, with Good Laboratory Practice requirements, Good Manufacturing Practice (GMP's) for pharmaceuticals and medical devices.

And then there are certification programs under the Department of Agriculture; certification programs in the Department of Defense, in the aerospace and electronic industries; NIOSH programs -- that's Occupational Safety and Health -- for safety equipment such as respirators; NRC, the Nuclear Regulatory Commission has certification plans and so has the Department of Energy for solar collectors.

It seems to me that setting up a certification plan by government regulatory agencies is an indoor sport and without real organizational or technical direction, necessarily, and some agencies seem to be making their own decisions as to what those rules are. Perhaps there is technical expertise in that, in many cases.

The Department of Commerce investigation of the number of certification programs in use by federal agencies is incomplete, yet already lists scores of programs, and I understand that a number of these programs involve products produced in other countries. So certification plans exist today, domestically, that have international ramifications.

We have already referred at this conference to the new element of certification introduced as a result of the GATT Title IV, Technical Barriers to Trade.

Please put that certification paragraph slide on, because there is reference in the standard that states: Each federal agency shall, with respect to any certification system used by it, permit access for obtaining certification under that system to foreign suppliers of a product on the same basis as is permitted to suppliers of like products, whether of domestic or other foreign origin.

I believe that that is the only reference to certification in the GATT Title IV. Leave that up there (the slide) for awhile so it can sink in as to just what that means. As a result, the U.S. now has a further reason to consider the structuring of certification, though not necessarily a mandate to establish certification systems. There is no doubt but that other countries see an international certification scheme as a means toward opening world markets for their products.

Let's consider in fuller detail the elements of certification. Obviously if similar testing is being done at many levels there are four possible levels: By the manufacturer; by a laboratory or inspection agency of the originating country conducted by or authorized under a government program; the third level, in the receiving country by a national laboratory and, (finally) by a sophisticated purchaser.

Now, if all the testing is done at these four levels there is certainly an opportunity for reducing costs by eliminating or at least minimizing redundant testing and inspection.

A major advantage of the certification scheme is that it tends to force far better communication as to actual product requirements contracted for. This improved communication in itself should provide more information to the producer so that product is manufactured in conformance to user requirements. I don't want to miss that important point.

Now, the certification arm of ISO, that is CERTICO, has identified five types of certification schemes. I put them on a slide as well. Now five certification types listed as type 1 through 5. All plans require type testing. That's what the X's across the top row are.

Depending on user requirements, economics and regulatory requirements, surveillance by an organization may be conducted on samples taken from the open market or the factory. That's the body of X's at the center. Notice that type 1 does not have that, while others do.

In addition there may be provision for an assessment of the factory quality control system initially and periodically during production or during the life of the contract. That's the assessment X. Only in type 5.

Now, hear me on this: Certification does not have to refer to a single scheme applying to all sorts of commodities and products, and consequently cannot mean the same thing in a different interval because the control requirements vary so widely. Don't panic over hearing about an expensive elaborate system that is needed in a given industry. It may not be necessary. A lesser system, still called certification, may be appropriate in your industry.

There is a tendency to envision a single idealized, highly structured certification system, but experience has shown this may be intellectually attractive but simply is not realistic for universal application. Thank you, on that.

Now, I'd like to briefly discuss the IEC, quality assessment system for electronic components which is nearing its operational phase after nearly ten years of preparation. Currently 20 of the more developed countries are participating in the plan with 11 countries scheduled for entry into the system as full certifying countries in the charter member first round. Along with the United States these countries presently are: Australia, Belgium, Denmark, France, Germany, Ireland, Israel, Japan, Switzerland, the United Kingdom, and others are expected to join.

Now, the overall objective of this pilot IEC certification program is to facilitate international trade in electronic components of assessed quality and to achieve this objective by the implementation of harmonized quality assessment procedures in such a manner that components released in one participating country are equally acceptable in all other countries, without the need for further testing.

This objective can only be achieved by a system that operates with integrity and appropriate checks and balances. We have a slide showing that system in use in the U.S.

In each certifying country there is a national authorized institution to manage the system (that's the fourth box down); U.S. national organization, National Authorized Institution; a National Supervising Inspectorate to initially approve component manufacturers and to conduct qualification approval of individual components.

The NSI also conducts surveillance of a manufactured certified product production and will conduct audit testing of his certified product. Additionally, the country's organization must also include a national standards organization -- on the left here -- that is responsible for specification management in the country.

In the United States the National Authorized Institution function will be handled by the Electronic Component Certification Board made up of representatives of producer and user segments of the electronics industry. Underwriters Laboratories was selected as the U.S. National Supervising Inspectorate and has been a major contributor and participant in U.S. efforts to develop an acceptable system. The Electronic Industries Association will function as the National Standards Organization for the system.

The specification base for the system is IEC standards, supplemented by provisional specifications where IEC standards are not yet available. Now, in our paper we have much more explanation of the system, prepared in detail by Al Wilson. So, the entire system, the package of this is described at length and very clearly presented in the paper that will be published.

I believe that certification systems should provide, also, for responsible manufacturers to certify their own product under an international system. In many industries, laboratories are available and manufacturers plants are the full technical equivalent of independent laboratories, and their production quality assurance systems meet or exceed any requirement set by a purchasing nation.

Provision for "self-certification" by manufacturers presents the need to determine how much dependence can be placed on the manufacturer to assume responsibility for product, versus dependence on a third-party certification program. No one can seriously expect all domestic or international trade to depend solely on the ability, professionalism and integrity of the manufacturer without some other evidence of assured quality.

A large purchaser (call him a second party), may be in a position to do the complete job of verifying manufacturer capability and establishing a scheme for assuring that purchased components and materials are satisfactory. This can be done by his own personnel at the factory or at supplier's plants, assuring that the quality system and continuous test and inspection procedures are adequate for his purpose.

In many areas a third party is needed to provide the assurance mechanism, but since only the manufacturer is able to apply quality assurance principles for effective continuous control, it becomes apparent that a third party certification system is fundamentally a weak concept, even though it has potential in certain areas.

Because of its limitations, easy prescriptions of third party certification as an answer to product assurance should be avoided. Third party certification is an available tool for proper application. Certification in any form may not be the best answer for all situations, nor could it be.

Now, a further factor in considering third party certification is the degree of responsibility that the certifier can or should assume. I understand that in some nations a third party is equally responsible for the product and in most other nations he assumes some portion of the responsibility.

This is generally not the case under U.S. practice. The need for certifier responsibility should be weighed against the basic quality control principle of supplier responsibility for products that he manufacturers.

Now, no discussion on certification would be complete without further mention of Underwriters Laboratories which may be considered the classic example of long term success in conducting a certification program, since UL operates an effective self-contained certification system relating to public safety.

Much of the effectiveness of the UL system results from meeting the needs of state and local code enforcement agencies. As such, it has some tendency to come in conflict with the federal approach of pre-emptive, broadly-worded legislation and regulation. Underwriters Laboratories serves as a basically independent, third party responsible for the accuracy of the tests that are performed under its supervision, for the safety characteristics of production prototypes or for checking on production and field conformance.

Activities of Underwriters Laboratories are a unique example of an economically practical, nongovernmental independent organization serving the needs of both consumers and industry. Yet, UL safety requirements are seen by some elements of international trade as a non-tariff barrier. This is related to complex factors: national policy and practice and even cultural and language differences.

Now, before reaching a conclusion that the substantial progress made towards international product certification will ultimately accomplish all that is being envisioned by its proponents, I would like to speak as a quality assurance practitioner, having worked with a wide-range of domestic and foreign consumer product manufacturers.

Over the years a number of basic principles have emerged in our work with manufacturers. Most of these have found their way into the literature and they are well-documented in industry: One, quality must be built into the product. It cannot be inspected into a product after it is manufactured.

Two, the quality system that will deliver perfect products for all

significant characteristics has yet to be devised. Some regulatory agency planners seem to assume that by identifying characteristics, setting standards and calling for a structured control system, that all products produced will necessarily meet all user requirements.

Three, in an industrial environment where products are constantly changing, product standards are frequently if not routinely incomplete or in a continual state of development upgrading. Standards development may take so long that it is conceivable that a comprehensive standard receives consensus approval after the product is no longer in production.

Four, while safety characteristics of a product receive much publicity, customer requirements cover a wide-range of characteristics including those related to product performance, appearance, workmanship detail, interaction with other products. All of these details require attention for the user to be satisfied.

Five, the manufacturer should invariably be willing to stand fully behind his product. Any plan under which quality responsibility is assumed by anyone other than the producer, provides the opportunity for the quality of future production to deteriorate.

Six, all mass-produced products vary within production runs and between runs, hence, not all produced products will be like peas in a pod.

I have cited these six principles of quality assurance on this occasion because we may tend to look toward simplistic systems for solution to complex problems. At times some of the elements of certification may seem to contradict good quality assurance practice. When they do, we cannot expect the results of certification to be fully effective.

Having considered the various aspects of international certification, now let's address the question of implication of certification arrangements on international trade. Certification schemes may be considered for products with a relatively long product life whose characteristics are relatively definable, which can be evaluated with tests that are repeatable. A wide range of products may meet these criteria, other than electronic components and products where electrical safety is a factor: raw materials; agricultural products, and other commodities are clearly areas where a standards definition is an important factor in international trade and where certification would seem to be of obvious benefit.

The voluntary standards system as it operates in the United States is unique in the world. In countries with greater centralization the government standards bodies of two countries would develop mutual confidence in their capabilities and could expect to achieve the goals of international certification through a formal program.

However, some countries which have nationally authorized laboratories perceive that they have difficulties when dealing with the United States. Dr. Podolsky mentioned that this morning. We all recognize the problems created by the existence of thousands of individual government jurisdictions throughout the United States at state, county, and municipal levels.

It is not uncommon for these local bodies to require approval of products for use within their local jurisdiction and to designate the approval agency.

Other nations, looking at the U.S. as partner in a certification agreement, correctly perceive the federal government as not have jurisdiction over such local bodies. As a practical matter, it is essentially impossible for a manufacturer in another nation to achieve approval of certain classes of products where a tangle of local requirements exists.

Perhaps the problem can be faced head-on by conducting a national conference on certification to consider controversial areas such as the possibility of federal preemption of local jurisdiction for local actions in conflict with the GATT treaty. Here is one that I hadn't known of until we investigated a little: Multi-national companies face a similar problem to those caused by the diverse state and local jurisdiction authorities in the U.S.

The plant of a multi-national company situated in a foreign country, itself, may serve markets in neighboring countries. The producer thus faces the problem caused by these purchasing countries each having diverse standards and code requirements. International certification agreements offer hope of opening up free trade at the international level for such multi-national companies.

Product standards can and are worked out by industry specialists for adoption and use within their industries. Thus far certification schemes have been developed in much the same way, industry by industry. However, as an international structure of certification systems takes form, the lack of a strong central control under the U.S. voluntary system will become very evident to other nations.

The existence of the GATT treaty with the consequent involvement of the Departments of Commerce and Agriculture in its administration forces facing of the issue of cooperation by government and industry. (Have I heard that mentioned here before?)

Since the great bulk of knowledge resides upon manufacturers and international traders, government must resist the temptation to take charge. Rather, it must recognize its proper role which is to prompt the constructive utilization of existing knowledge, a significant amount of which is to be found in government.

ANSI must recognize its proper role is to bring to bear the best available knowledge and input to the international scene. In contrast, the private sector, and particularly trade associations, must recognize that there is a role for a constructive government presence in partnership with the private sector in a cooperative mode that has enabled other national efforts to out-produce, out-plan, and out-maneuver other nations. This group should set to work to develop a National Policy on Certification, using a consensus approach such as was used in developing the National Policy on Standards.

Few will deny the existence of a communication gap between the private sector and federal government's perception of the system needs and an appropriate response to those needs in such fields as product safety, use of voluntary standards and certification on the domestic scene and, now, international standards and certification.

Most knowledgeable participants and observers of international commerce seem to agree that there is a compelling need for a strong and knowledgeable coordinating body to protect the interest of the United States on the international scene. There also seems to be agreement that such coordination should contain the best available knowledge from all available sources.

We think that the need for industry-government cooperation is the prime concern that this group should address -- more important than success stories concerning particular systems or ideas. The conclusion seems inevitable: Only with a coordinated program can the United States hope to participate in international certification.

Whether such a system operates within the private sector, under a government program, or is operated by a quasi-governmental organization, there is no question but that a national policy for international certification will be essential for the U.S. to realize the benefit of international certification.

I thank you. (Applause.)

MODERATOR SIMPSON: Thank you very much, Bob. Question and/or comments of our two speakers? We have one over here. Howard?

MR. HOCHSCHWENDER: My name is Herman Hochschwender. I am President of Smithers Scientific Services which is, among other things, a testing laboratory.

I have several comments and then a question. First of all, there are some 2,000 private testing laboratories in the United States and I haven't heard anything at this conference so far as to how that part of the technical community is to be incorporated into this whole process of

certification and international trade. So, in a very loose way I am asking for further comments on that.

Secondly, I take a little issue with the speaker, the former speaker, on giving Underwriters Laboratories such a big commercial here. There are many others of us that are equally qualified, maybe not as large, who should be considered in this process of certification.

Another small comment about the co-responsibility of the testing laboratories. Again, there are laboratories which certify construction materials, for instance, and furniture and other products, and under civil law at least they have from time to time been held co-responsible in that they have been included in any civil action against -- that was jointly against the manufacturer and the certifying laboratory.

But I would like to repeat my question now: How are we going to include this community of laboratories both in the development process of the new approach and how are we going to unify them?

MR. WILSON: I think I'd like to comment on the first question by citing how laboratories are treated under the IEC quality assessment system for electronic components. This is a pilot international program and the requirements are the same for the manufacturer test laboratories as they are for an independent test laboratory. A manufacturer can utilize his own laboratory or go outside and utilize an independent test laboratory.

The general criteria are that the laboratory must have requisite personnel and equipment and calibration traceability and a rather simple requirement that the laboratory shall be free from influence by the manufacturer's production department.

So, again the bottom line, the point here is that in at least this pilot program, independent commercial test laboratories are afforded an equal opportunity along with the manufacturer to participate.

MR. PEACH: The second part of the question includes our UL commercial. I guess anytime you cite one example, you have to state others as well. I cite, and I don't back away from saying that the UL is a good, an excellent example of a certification program within its given area and that it is not the only by any means.

The AGA program, for instance. I could have developed it as well. There are many others, meeting many, many various needs. I agree with you on that.

There was a third. I don't know how to answer your further comments.

MODERATOR SIMPSON: The question was: In discussion of future national and/or international certification systems, how do the independent labs get a piece of the action? Get themselves involved both in preparation of and in participation in those systems?

MR. PEACH: Dr. Forman, is that a NVLAP question?

DR. FORMAN: That could be although I'm not sure that I care to try to respond on behalf of NVLAP. I'd rather call upon either Doug Dies, speaking for ACIL possibly -- the American Council of Independent Laboratories -- if he would care to speak. Or Roger Amorosi who has been identified with this organization and also the American Association of Accredited Laboratories.

I'd rather have the private sector response to that, rather than the governmental. At least at this point.

MODERATOR SIMPSON: All right. Anybody in the private sector here that would care to take a shot at answering that question?

MR. AMOROSI: I am Roger Amorosi. Speaking for ACIL, if I may -- American Council of Independent Laboratories -- and also for AALA -- American Association for Laboratory Accreditation.

Bob, I am afraid I got to fault you again. You mentioned the government program, NVLAP. There is a private sector program, AALA.

DR. FORMAN: Absolutely.

MR. AMOROSI: There are some differences in the structuring but I believe that both are recognized in national programs for accrediting laboratories.

When I say "national" program, I mean that if either one -- NVLAP or AALA -- will accredit laboratories in any discipline for any products and so forth, there are hundreds of laboratory accreditation programs but most of the others are in a particular product area or particular interest, one being the AAMVA, the American Association for Motor Vehicle Administrators. They accredit laboratories that test automotive parts for approvals by use by motor vehicle administrators.

I feel that these two programs will provide the mechanism for recognition of our laboratories within the U.S. and both of these programs are working with ILAC, the International Laboratory Accreditation Conference which is a group of countries that have met the fourth time, at the end of this month in Paris, to establish, well, I can't say criteria but the considerations involved in acceptance of test and certification data.

Howard, do you want to add on anything about ILAC?

DR. FORMAN: Yes, Roger. Thank you very much for your contribution. I think now it would be appropriate to add just a couple of thoughts to what you are saying. It's sort of built upon your response.

I think as Roger has correctly pointed out, there are a number of, well, I think we have identified through a contract search, 75 or 80 programs in the United States for the accreditation of testing laboratories, NVLAP being just one of them. AALA being another. These, of course, are supposed to be across the board for the accreditation of almost any kind of product or service, whereas the other 68 or 70 or whatever they are, apparently are of limited scope.

The point to understand though, I think the response to the gentleman's question is that with this movement, as more and more laboratories, testing laboratories, become accredited for their particular area of operation and expertise, anyone getting involved in a certification program will be able to refer to those accredited laboratories and make a choice because testing is the keystone to certification, as I understand it.

I hope Bob Peach and Allen Wilson will agree, and if that is the case, it is certainly going to be helpful to be able to go to a laboratory that has demonstrated to the world its competence, according to some established standards, or whatever the system is for accreditation.

So I think that with that understanding in this growing movement accreditation in the United States, and concomitantly through many countries throughout the world, through this ILAC movement that Roger Amorosi referred to, you will have a growing opportunity in this country and in other countries to develop certification programs where large and small laboratories will be able to qualify to participate in certification programs. I hope you will accept that as a reasonable posture for the future in which you will have a definite part.

MR. PEACH: I want to make one further comment, Dr. Forman, on the burden we face in trying to put together a balanced paper on the total subject of certification and mentioning that, and including in that kit of tools, laboratory accreditation.

That's a building block of certification. I think we presented it this way, but in a one hour paper -- I gave us a thirty minute dip into it -- that unquestionably any one of the building blocks can be developed and deserve being developed in greater length.

Laboratory accreditation is an essential and important ingredient. But only one. And many of the other mechanical problems of certification, after you have the product specifications identified, becomes an important point in administering the total plan.

There are a lot of pieces to this and what we have attempted to do is to name them, and there was an example or two but we really could not represent all of the areas in sufficient depth to cover all of this in this amount of paper. But they are all referenced and of course Certification, the CERTICO booklet, does name the guides that CERTICO has addressed in each of these areas.

MODERATOR SIMPSON: Mr. Barton?

MR. BARTON: I'm Derek Barton, Underwriters Laboratories. I'd like to comment on the suggestion that Underwriters Laboratories' standards constitute non-tariff trade barriers.

Underwriters Laboratories' standards for safety are developed, of course, with the prime objective of satisfying the minimum safety requirements for the U.S. public. Many interests in this country participate in the development of those standards: Federal authorities, state, local, consumers, technical interests, manufacturers, and others.

We feel that they are standards which are considered adequate. As far as the certification program is concerned, UL certification programs, UL's programs are fully open to all manufacturers and all countries. We feel that we would fully comply and do fully comply with the provisions of the GATT code which says that certification programs must be open.

We currently operate programs in some 49 foreign countries. There is no difficulty at all in foreign manufacturers obtaining authority to utilize the UL label and many products of course are coming into this country every day, bearing the UL label.

MODERATOR SIMPSON: We have a question down in front here.

MR. McADAMS: I'm John McAdams. I'm in the Standards Office of the Secretary of Defense and over the years, without a certification program or an international laboratory accreditation program, the Department of Defense has built up its own certification program.

It started years ago with the Navy Department's "acceptable list," and it developed into our qualified products list program for which the policies for it are described very well in the defense standardization manual. The DOD 4120.3M.

We also have another program which deals with product certification and that is covered by what we call specification control drawings and source control drawings. The policy for that is covered in the well-known DOD 1000, for engineering drawing practices.

On these drawings, products that are certified by test, qualified by test, are listed. In either program only those products that are covered on the qualified products list or covered on the specification control drawing may be acquired during purchase.

The reason is that it is absolutely necessary that we be assured that these products meet the specification, otherwise a critical military operation may be lost; there may be a loss of life and limb. Also, it prevents the repetitive testing of products where there are long and expensive tests.

There is only one exception I know of where in each of these programs the individual laboratory that can conduct the test is mentioned. It is either a government laboratory or a private laboratory. So far as I know, for all products in both programs, all of these laboratories, all of these approved laboratories, are within the boundaries of the United States with only one exception. In the U.S./Canada agreement, we have made an agreement with Canada that will accept any laboratory specified by the government of Canada.

We still want to see the test data, however. Now, my question is: In the absence of an international certification program for laboratories, how could the United States government, the Department of Defense, ever accept the naming of any laboratory in any foreign country and be really assured that the test was properly conducted, the analysis was honestly made, and the products listed were correct?

That's my question. Can we really deviate from our present policies at the present time? Or, how long will we have to wait?

MR. WILSON: Again, using the example of the IEC quality assessment system for electronic components, and I keep reiterating, this is a worldwide pilot, voluntary system. And I underline the word "pilot." There have been ten years of vigorous discussion and hammering out of criteria at some eleven meetings, and the system has been very carefully put together so that in each country there is a management group that manages the operation of the system in the country to assure that it meets the rules.

The rules require that a laboratory be inspected and meet certain criteria and I don't think that we would have gone to all this trouble nationally or internationally if there wasn't some confidence that the integrity of the laboratory approval and its resultant test data have some worldwide integrity.

That's the objective of the whole system and I think, John, that although this is maybe hypothetical in nature, I think people who have worked on this program have complete confidence in that integrity.

MR. McADAMS: I just want to add one thing. We do conform with the OMB circular A-119. We don't deny any foreign manufacturer the right to get on the American QPL; however, he has to follow our rules. Our rules are that he must submit his product to the United States laboratory, pay the cost of testing, and if it passes those tests he will be put on the QPL.

Thank you.

MODERATOR SIMPSON: Other questions? We have one down in front and then we'll go back here. Dr. LaQue?

DR. LAQUE: Frank LaQue. Perhaps a little historical perspective might be helpful, although some of the points I may deal with have already been covered by others.

The history of NVLAP goes back to action by OSHA to publish their requirements for testing of products for compliance with their regulations. They went to the extent in their proposal to mention only two laboratories that they considered to be qualified to test for compliance with their regulations. This resulted in a rather substantial storm of protest by trade association laboratories and others who were being excluded by this edict.

About the second day after I got to work in the Commerce Department, I was invited to attend a conference to discuss the OSHA proposal and someone got up and said: What is the Commerce Department's position in this matter?

I mentioned that I had been in the Commerce Department two days and had no idea if it had a position or if it ever would have a position but if they wanted a comment from me, as a person, I thought that in all probability we didn't need as many proposals or systems for accrediting testing laboratories as there are government agencies.

Consequently I thought that perhaps a single system might suffice for a number of agencies and I thought that if a single agency ought to be involved, perhaps it ought to be the Commerce Department.

At the same time I had been through the throes within ANSI of trying to develop an ANSI certification system and I found that it was completely bogged down by arguments as to whether only the laboratories that were third party could be used or whether a manufacturer's laboratory could be used, or some other kind of a laboratory could be used.

So I thought to cut the Gordian Knot the simplest thing to do was to separate the accreditation of systems from the accreditation of testing laboratories. And since the latter was much easier to undertake than the former, we proceeded with the system for accrediting testing laboratories that now exists in the form of NVLAP.

The notion was that once you had a means of accrediting testing laboratories and coming up with a group of laboratories that had been accredited, anyone who wanted to make use of such laboratories could do so as part of a system in which he would define the other requirements of the system to suit his particular purposes.

So I think that if we keep separate in our concept from the need to accredit systems from the advantage of accrediting laboratories, we can make some headway.

Thank you.

MODERATOR SIMPSON: A comment up here?

DR. PODOLSKY: I'm Leon Podolsky. I have two points. First, with regard to Mr. McAdam's question on how you can have reliance on the integrity of a laboratory or the test data which it produces and to amplify the comments made by Al Wilson.

In the IECQ system, on the certification of electronic components, there is required to be in each country a national supervising inspectorate which has the legal obligation to review and approve the laboratories but not ad hoc or at will.

A rigorous rule, a very rigorous set of requirements has been written internationally to apply to the approval of laboratories that will be permitted in the system.

Second, there has to be, if it is going to be an international system, as there is in the IECQ system, an international inspectorate coordinating committee which is made up of the representatives of the inspectorates in the various participating countries to be sure that the rules are in fact applied with equal rigor and vigor in each of the participating countries.

If you are going to have an international system, then you have to have written rules and requirements. You have a body in each country which will police those and you'll have to have an international body to coordinate the activities of the national bodies to be sure that every country is applying the rules with the equal diligence that is required for the integrity of the system.

Now, this raises my second point. I have observed here in the last couple of years a great deal of discussion between independent testing laboratories, the various organizations that are being set up to accredit laboratories of one kind or another, whether they are manufacturers' laboratories or independent test laboratories.

I don't believe that you can, as some independent laboratories expect, get accreditation across the board for a whole discipline. For example, for electrical testing or electronic component testing for a laboratory. If you are going to use a laboratory in a certification system, the laboratory can only be accredited as to the ability of its personnel, the qualifications of its personnel, and its ability to make tests to particular specifications that are involved in the certification system.

For example, an electronic testing laboratory that is perfectly competent to make tests on semiconductor components may be totally incompetent to make tests on electron tube devices, even though they are similar disciplines, they are both defined as electronics. The requirements of personnel, the requirements of the apparatus, the requirements for procedures may be very different.

I have had a good deal of correspondence in the last several months with people from independent test laboratories regarding their inability to get consideration for approval across the board of a total discipline.

I point out that in certification systems, you simply cannot approve a laboratory except in one manner and that is that the qualifications of its personnel, its apparatus and its ability to make tests to particular specifications.

MODERATOR SIMPSON: Thank you.

We have a question here and then we'll have one on that side, Howard.

MR. SCHOCK: Harvy Schock. One comment that ought to be brought to our attention is that we are very fortunate in the United States to have a voluntary system that has provided a generic and specific base for evaluation of testing laboratories and before you can do any accreditation, you have to have evaluation criteria.

The ASTM does have a committee that has developed generic criteria. They have a voluntary national standard and they have built upon that standard various specific standards in various areas such as vibration, accoustical testing, underconstruction evaluation, building materials and the like.

So, we in the United States have a system of voluntary national standards that have in fact been used in the development of the NVLAP program and they are in fact being used on a basis, active basis, in international applications in other countries.

I can personally attest to that because I have delivered copies of them to many countries around the world for their consideration by their standards bodies.

So we have something similar to the situation that was described yesterday in the ASTM code, in the ASME code, rather. We have in the ASTM a viable system for developing these criteria and we welcome the participation of anybody who is interested in that work, either on a generic or in the various specific areas under the various committees that are applicable.

MR. BREDEN: Leslie Breden from HUD. Basically, there is an activity going on in the federal bureaucracy, if you want to try to develop some sort of policy in certification. It's kind of at a preliminary stage right now but I guess that is all we can say is that we are actively working on it.

But I guess what I really would like to find out is, well, there seems to be some hesitancy on the part of, particularly let's say for example, ASTM, to get involved in certification whether there is some legal liability problem or -- I'm not really sure exactly what the problems lie in -- but I am wondering if Al Wilson could say a little bit about what ANSI's position is and why they have some hesitancy to get out of the certification business in general.

Is there something written in their constitution or their charter or policy that they don't want to be involved in or exactly what is the problem there?

MR. WILSON: This is a question that is probably going to take a collective answer from several people. There is an ANSI bylaw, as I remember it, prohibiting ANSI from operating a certification program. I would like to defer to Dr. Podolsky to answer the rest of your question. Undoubtedly liability exposure is a consideration. One has a minimal amount of, and I am speaking now from a trade association viewpoint, in developing voluntary standards from a product liability standpoint.

EIA standards and other trade association standards contain a notice in the front that in effect is a legal disclaimer, however, when an organization operates a certification program and a product so-certified fails and there is either some personal or financial injury, then you have an entirely different situation.

One of the unique aspects, in fact, of certification programs is that in our discussion with liability insurance carriers we find there is not an established body of experience in insuring organizations that operate certification programs. Apparently it is a new thing in the United States. We are having to break new ground, establish new criteria.

As far as the ANSI is concerned, Leon, I had a question in my mind yesterday on your presentation about whether or not the new program for standards management, that you proposed, included or excluded certification programs?

MODERATOR SIMPSON: Dr. Podolsky would like to respond. Don't be concerned. We will break for lunch. We are still on schedule.

DR. PODOLSKY: Let me make it clear, ladies and gentlemen, I have no authority whatsoever to speak for ANSI. I am not an employee of ANSI and I am not an officer of ANSI. I am a member of the board of directors and that is my entire contact and knowledge of the ANSI posture.

If Bill Rockwell is still here and in the audience anywhere -- Bill is the legal counsel for ANSI and I believe that he can give you better answers from a legal standpoint than I can. I will answer specifically Al Wilson's question, of the body that we have proposed as a joint new International Standards Council of ANSI which has both private sector and government representation on it. We did not intend to deal with the subject of certification.

It is intended to deal entirely with the subject of international standards and nothing else. I would defer to the expertise of Bill Rockwell for the other answer.

MR ROCKWELL: Yes. Les Breden of HUD, the very fine young man who asked the question over here, is a member of the ANSI certification committee and he is familiar with our procedures and Mr. Peach also serves on that committee and they also both serve on our international certification activity which is advisory to CERTICO.

It is ANSI's policy not to actually certify products. We are not staffed up to do it. We are not in a position to do it. But we do have a program which we developed, a procedural program which is used by many people as guidelines for the accreditation of certification programs. That is, third party programs.

We also have two standards in this field: Z-34.1 which covers third party certification programs and Z-34.2 which Bob mentioned in his speech which covers the self-certification programs.

That is our position and I will be glad to send any of you a copy of our procedures in this area and any other information on the certification activity.

MODERATOR SIMPSON: Thank you.

We have another question or comment down front.

MR. MAHAFFEY: I'm Chuck Mahaffey with the National Bureau of Standards. In a certain way, certification and certification activities

highlight the need for a strong U.S. coordinated program of government and industry. Not only in standards but in certification of the standards activities.

As you know there are many activities going on at the intergovernmental level in such organizations as the United Nations. They are going on almost daily. These government officials are attempting to resolve technical conflicts in the regulations that they are responsible for.

In many cases the solution to the problems which they have rests in the field of standards or in certification of standards. And, again, to bring a solution of some merit to the problems which they are addressing, it means that they must somehow address these problems either in organizations like ISO or IEC or in many cases they are actually tempted to do this within the United Nations themselves, or in these intergovernmental groups.

But it does indicate that if they choose to try to solve their problems at the standards level through ISO, it means that they must have great contact then with the people who are going to represent their countries in the ISO committees that are set up for this particular purpose, in such committees as involve test methods which are of course critical in the area of certification.

But in many cases, too, in order to solve the problem at the standards level it will require extensive amounts of research which in many cases, well, the research is provided by a national laboratories similar to NBS and there again you need this cooperation between the private government sector in all facets of this thing.

It's not just sufficient to tackle one of these problems. They are all interconnected. And it again just highlights the need for a strong coordinated, well-defined program to permit government-industry cooperation in this whole field.

Thank you.

MODERATOR SIMPSON: Thank you.

Before we break for lunch, let me make an announcement, if I may. The program shows that this afternoon will be broken into three sessions. One titled: A Free and Open Discussion. The second is: Proposal for Future Work, etcetera. And the third is: A Wrap-up by Moderator. The combined time shows it to be approximately two hours.

What we intend to do is not have distinct sections but in fact a session this afternoon, starting when we reconvene and that it primarily be a continuing dialogue. I will not artificially extend it. It is my

expectation that, for your travel plans, that we will probably complete in less than two hours. There has been extensive discussions as we have gone through. If there are questions, commentary, it will, also, not be artificially cut off short. But my guess is it is probably another hour.

I also serve notice on Howard Forman that I would expect that if you have any questions that you would like to direct to him, that you would be able to do so as a representative of the Commerce Department, in addition to Agriculture and FDA which have exposed themselves.

Not all speakers will be here but many of them will. You can direct questions to them. I remind you that there is an opportunity for follow up because I believe the guidelines which the Department laid out is that they would receive papers for another thirty days.

Just before we break for lunch I would like to call to your attention to the challenge, if you will, that was laid down by Larry Hodges this morning. What he did was repeat the words, much better than I could, but I am going to summarize it just a little bit. It's food for thought that you can come back after lunch and try to address yourselves to.

What he said is the same thing as has been said time and time again and, at the last, by our last speaker, Chuck Mahaffey. He said: We need government-private sector cooperation and a whole bunch of things.

What Larry also said is that the time is now to set aside some of the old problems and get on with it. But the thing I want you to focus on is, as he said: If there is anybody or any group of people that are going to provide suggestions as to how you cooperate in the future, as opposed to saying you need it, that is the group represented in this audience.

In other words, if you don't do it you may expect that the job won't get done. If you have such suggestions, as to how you can foster cooperation or provide a better environment or specific mechanisms, avail yourselves of that opportunity this afternoon and during the next thirty day period.

Let me thank our speakers and adjourn for lunch and we will reconvene on schedule at 2:15.

(Whereupon the meeting recessed for lunch from 12:45 p.m. to 2:15 p.m.)

MODERATOR SIMPSON: Let me do at least one thing before we get started. I do not propose to attempt to do a conference wrap up as identified on the program.

Let me just say that it is my understanding -- and I want to direct the question specifically to Howard Forman -- my understanding is that the Commerce Department will be willing to review the entire record of this proceeding, including any additional papers that are submitted, and to analyze that record for any suggestions, either explicit or implicit for any follow up studies, suggestions, etc. and, once identified, they will at least publish them in some form so that those in the audience will know what they are.

Is that right? Will you do something like that? Yes or no?

DR. FORMAN: And you're a former government official forcing me to say it in one word? Shame on you. "Yes." (General laughter.)

MODERATOR SIMPSON: Thank you.

DR. FORMAN: I was going to explain how we do it, Dick, but obviously it will be in our proceedings. First, the suggestions themselves. Hopefully you will get them spelled out and emphasized this afternoon, possibly. But even those made in the papers, if they don't get repeated this afternoon we will want to extract them and get them in a place where we can identify them and give everybody else a chance -- the public -- a chance to respond to that.

We're going to publish a second volume. I think I indicated that in the program, where, if people write papers in, in which they discuss anything that they heard in these two days or read in the proceedings themselves. Even if it goes in a third volume later.

We want to maintain a continuing dialogue. This is only the beginning. We don't expect answers today. We want to emphasize the problems. This is what I hear being done. We will do all those nice things under the word, "Yes."

MODERATOR SIMPSON: Thank you.

Second, I would like to ask Howard Forman if he would come down and join me on the platform, although he is not scheduled to do so, for the rest of the afternoon, to respond to questions that anybody might want to address to him.

Now, to start this afternoon's discussion or wrap up, whichever it turns out to be, I'd like to ask if Larry Hodges would be willing to repeat

what he said this morning, on how he views the conference. Would you, Larry?

MR. HODGES: I might have a lot more to say than I did this morning.

MODERATOR SIMPSON: I think we can allow all the time you want, as long as it's not over two minutes.

MR. HODGES: Gosh, I've used half of it getting up here already. I'm complimented that you would ask me to say this, even though I don't think that I have any special wisdom to bring to this group. But I'll try not to be outdone by any of the other speakers.

I know ever since I made my high school graduation speech, I have never passed up the opportunity to make a speech. I'm probably a little like the Irish Airlines that was not to be outdone during the days when we were grounding the DC-10 in our country. They looked around and unfortunately they didn't have any DC-10's to ground but as I said, not to be outdone they grounded two DC-3's and a DC-4. (General laughter.)

So I'll see if I can shoot down a couple of old World War II airplanes for a little repair and maintenance.

I think one of the several major emerging issues is that of reducing the adversary relationship between the private and public sector to the point where it is no longer disruptive to the process. And I emphasized that that awesome responsibility, I thought, fell upon the group represented at this meeting because I believe that we have the expertise. We represent the organizations and we represent the resources to do that job.

I think a free society has the right to expect us to do that. If we don't do it, the system will likely gravitate to the system that is found in the Soviet Union where the government controls the system. It acts arbitrarily and capriciously and it is insensitive to new and emerging technologies.

My experience in doing business with the Soviet Union over the years indicates that the system really doesn't work very well. One of the things to accomplish this new partnership, I think, is a change in attitude among all the participants.

There is some kind of an old adage that reasonable men, equally informed, seldom disagree. Now, unfortunately in the '60's and the '70's we have been dealing with a lot of unreasonable men. The Senator Abourezk types and some others are gone but there are still a lot of them that are around and I could give you a long list after this conference but I won't read their names into the record.

So you really can't deal that way with unreasonable men but I think we are now dealing with reasonable men, equally informed. That is certainly a problem because in most instances few people are equally informed on all avenues of the subject.

Conferences such as this certainly should improve the level of being informed. As I have listened I believe that there have been at least three suggestions, either inferred or directly suggested as a way of accomplishing part of this task.

One is the adoption of a system very similar to DIN in Germany. The other is the government established enterprise operated by the private sector, such as the Canadian standards council example. The other is the Leon Podolsky proposal. I still want time to study that in depth and I hope you'll do the same. I know Leon would welcome either your telephone calls or your written comments or anything, either constructive or destructive on that system.

Being an old country boy I happen to know that a hybrid is much more vigorous than either of the parents and I believe on the surface that Leon's proposal represents a single cross, open-pollinated, hybrid of the Canadian and the DIN system and it merits, I think, your deliberate study.

Whatever course you take, let's get on with the rat killing before somebody else throws this thing in reverse and unplows about 13 acres before we can get it stopped.

(Applause.)

MODERATOR SIMPSON: Thank you, Larry. I am now going to ask if there are people in the audience who have comments and/or statements they would like to make as opposed to questions. And I'm going to start with Howard Forman, since I asked him to come up, if he has anything that he'd like to say.

DR. PODOLSKY: Excuse me. I simply want to set the record straight. I am very flattered that Larry Hodges referred to the report which I gave yesterday as the Leon Podolsky proposal. My only claim to fame is that I was Chairman of the working group. That proposal was not my personal proposal although I certainly whole-heartedly endorse it. It is the report of a very competent, seven-man working group that worked for a year to develop the proposal.

I do not want to obtain the credit in my own name. I present that in the name and under the auspices of a working group that I named yesterday, and which is named in my paper.

Thank you.

MODERATOR SIMPSON: Howard, do you have any comments you would like to make?

DR. FORMAN: Like Larry, somewhere along the line I got, I guess you might say indoctrinated in the idea that if you stick a microphone in front of me, I am going to use it.

And I do have a few things to say. I want to set the record straight on a few things. I think since we are making a record, a public record, it might be important to do so. First of all, I regret that the lady from AFL/CIO has left us. If she is here, I wish she would raise her hand because I wanted to say this while she was here rather than have her read it in the record later.

She said in her remarks that Labor was excluded from the conference. When somebody reads that in the record, that could raise all kinds of implications.

The facts are as follows: In planning this conference we sent out a Mailgram to 220 organizations listed in some kind of directory of associations or what-not. One of them went to AFL/CIO. In the Mailgram we made it clear that we planned to hold a public conference and invited participation by all concerned.

She was one, Ms. Jager is her name. I think her position is in the Department of Economic Research of AFL/CIO. She called and asked to be a participant in the planning group. Everyone who called or wrote and asked that same question was invited. And that is how the group grew to about 25 or 30 people.

Following a practice that I have followed on my own initiative in the four and a half years I have been in this position, I had decided to make that planning group a 100 percent private sector organization or group with some federal government advisors sitting there to give advice but not to vote if a vote was necessary.

She was unable to attend that day and so she sent her assistant, Dale Dunlop. So she was represented at the planning session. That day the group decided, not I. I did not design the conference, the group designed it. They decided that they would discuss something that I had presented, work our staff had done. About 16 or 18 potential topics for consideration. It grew, with their discussion, to some 33 topics.

The group decided that each of them would go home and write me a letter with their comments as to which subjects or topics they thought should be addressed at this conference, recognizing that we would have a limit of eight papers, as we had planned it.

Also, they were to identify proposed speakers. Ms. Jager wrote me an excellent letter with comments on most of the topics that she thought were important and later I had a chance in our correspondence to correspond back to her and tell her that in fact we had selected, I think, 9 to 10 of the ones that she had recommended.

She did not mention or suggest a speaker. I proceeded, in view of the shortness of time, to go ahead. The group had decided to pick a smaller group, a subgroup, to do the actual mapping out of the program. We had another meeting of that smaller group and identified the speakers, some of whom were suggested by the other people of the larger group that had written to me and made recommendations.

Then we published the proposed program in the Federal Register. When Ms. Jager saw that notice she wrote me a letter and called me and said: There is no spot in the program for Labor. I said: Well, I don't know whether you mean a specific proposal, an issue, or a person. But your representative was there and never suggested it. You wrote a letter and didn't propose a speaker.

Well, she said, we still feel we should have a spot on the program. I said: Madam, time is short, the program has been set in place. I respect Labor. I have a personal history of involvement with the Labor movement which might be considered favorable by those in the Labor movement. I'm not anti-Labor but I also know that there are other interests besides Labor that are not represented here, too, who might wish to be represented. And I cannot see how we can make an exception and open up the conference just for you.

This went on to the point where she had a superior write to my superior and so it went. Nevertheless I told her again what I thought her position should be. She should come and speak at the Q and A period, as she has done, and that she could send all the representatives here that she wanted.

She gave me a list of 27 persons and all of them were invited. I don't know if they all came but they were invited. And I also urged her, at least in two or three letters, that what she ought to do is have some very good, sound papers prepared which we will gladly publish, on any issue she wants that is related to international standardization and the Trade Agreements Act.

I hope she will comply with it.

So much for that point of the record.

Admiral Hennessey yesterday had called attention to a possible difference in culture between Canada and the United States. I think he was trying to explain why, possibly, we might have some problems in considering the recommendation made by Dr. LaQue, of a Standards Council of the U.S.A.

I said that I didn't think there was a difference in culture or if there were, we were fast coming up to the Canadian culture, and might one day be able to be more or less on a par, so I wouldn't think that there would be that type of a distinction.

I also suggested that we have examples in the United States of quasi-public corporations. I had done a little research on that. So our culture has already become accustomed to that type of organization, erected by an act of Congress, by corporate charter, federal charter, in which they explicitly state that it is not a government corporation. Employees of the quasi-public corporation are not federal employees. I cited six or seven examples of such corporations and I promised to give him a copy of it for his own information.

I have provided him with a copy of the document I prepared on this some time ago, and I will be happy to provide copies to anyone else who may be interested.

I'd like also, and this is sort of on the humorous side, but nevertheless it is a factor to point out (I think Admiral Hennessey is aware of this but maybe not) that Dr. LaQue happens to be a Canadian by birth, and an American citizen by naturalization. He rose to the Vice Presidency of the International Nickel Company, later known as INCO, which is a Canadian corporation.

He still has an affiliation with INCO, I believe, in some way, even though retired. So I had the idea, and I won't speak for him but I am just guessing that he is familiar with the Canadian culture and he has long had exposure to American culture. My guess is that he hasn't seen any great problem in trying to transfer a little bit of the Canadian culture into the United States.

On this point about government-industry cooperation, and here I would like to get to what I think is the crux of anything that I am going to say and have been saying. I came to this position on June 1, '76, and by my own long-term plan I will leave here not later than February 28, 1981.

I have long since announced that to anybody that is interested or concerned. I have a long desire to get back home to Philadelphia where they will have the world champion baseball team and maybe the Super Bowl champs --

(Laughter and applause.)

Thank you. -- and rejoin my family, and do whatever work I can for the standards system which I am now inextricably a part of.

But when I came to it, I must confess I never knew why I was even appointed to the position since I had no background in standards. I made my

first public confession at an ANSI update meeting in New York in December of '76, when I said: I think I've figured out why I was asked to come here. I was probably the only person in the world who might accept the job, who had no bias because I knew nothing and therefore I couldn't be biased.

Anyway, if that is a qualification, I guess that really is the only one that I had. I still feel I am unbiased but four and a half years -- one listens and learns. When in the public position which I am holding, -- as some of you who have been in public life before recognize -- this is a fact of life.

I have often wondered about the way our good Lord designed us as humans. I figured, for example, that he gave us a couple of ears to fill out some kind of a cosmetic effect; to make us sort of fit into an artistic axial balance. But I found out there is another reason for it. You need both ears when you work in the government fishbowl. I've been receiving information for four and a half years from people in the standards field and industry, in one ear, telling me about all the ills in the system.

Then I hear from the other ear, people telling me all the good things in the system. Somewhere along the line they may be contradictory, even to the point where they may be deceptive. It's hard, sitting in a position as I have, to try to make a judgement and remain neutral and try to be constructive.

Nevertheless you have to do that if you are to do your public job as your sworn duty. One of the things I can tell you that I have heard: Many people in the standards system, the private sector, the government -- but mostly from the private sector -- say, almost from the day I came here, that what we need is more cooperation between the government and the private sector.

So, what I am hearing today would normally be like heart balm. I was delighted to hear Dr. Baruch's reference to such cooperation as a theme for this conference. He did it on his own. He didn't ask me what to say. Believe me, he never does. I was delighted to hear Larry Hodges make that his particular point of emphasis. I think that is a key expression, coming from a gentleman of his stature.

And of course, for Sandy Trowbridge, the President of NAM and his tremendous background to say the same thing, that is just great.

But I think Larry, Larry Hodges, that is, keyed in on the real issue: Cooperation means different things to different people. It is quite evident. One of the things that I have learned is that some people consider cooperation to be: If you do it my way, we'll cooperate.

I've seen too much of that from the private sector, certain segments of it. You'll never get the government to "cooperate" with that type of an

arrangement, because the government is a behemoth that nobody can control or deal with on such a basis -- and I say that advisedly, having been a student of government for a couple of decades.

Another thing, we have had different proposals, specific proposals for government cooperation and Larry has mentioned three of them. There actually is a fourth. It is dealt with at some length in the LaQue paper which you will read in the proceedings.

It was actually a proposal that preceded the proposal that came up at the Podolsky working group. In fact it was the insistence that it be considered by the ANSI board of directors that finally influenced, I believe, or induced the board to at least consider it and have it referred to the International Standards Council to be considered with other proposals. I think that was appropriate, that it might be worthy of consideration.

The working group, in my judgement anyway -- I said that in my separate concurring opinion, well, maybe I didn't put it in paper, but I will say it now -- I think some of us felt that the idea which I personally preferred as one way to go to establish genuine cooperation between the government and the private sector, was too radical perhaps in the minds of some. As expressed by Frank Feely, twice yesterday, it gave some people concern that it would make, that it would induce the government to, quote, take over the private sector -- a fear which I do not share. In fact, I completely disbelieve it. There are too many safeguards that have been mentioned today that would prevent that.

Recognizing that, the group turned to what I would consider an alternate proposal. It is very constructive. I went on the record again yesterday as saying I favored it. I think it is one way to go. It should be given serious consideration.

So I'm just suggesting that there are four, not three proposals which I hope will be considered.

Lastly, in terms of private sector-government cooperation, let me tell you that I hope there is genuine sincerity in those of you in the private sector who are possibly advocating this and that you are not just saying it because these are the days when it is expected of you to say it. I hope it is not just a case of your being emotionally aroused by the proceedings of this conference, and that you really mean it is highly desirable for the government and the private sector to work out genuine means of cooperating with each other.

Because if you don't, then possibly all of this is wasted, and you will fall heir to other criticisms and attacks that you have been objecting to from other sectors of the government -- legislative and elsewhere.

The reason I give you this cautionary note is that it is not just age and potential wisdom that is supposed to come along with age, it is experience. The pressures that I have had inflicted and imposed upon me to do certain things, either to stop doing what I wanted to do in the public interest or to change a path that I felt was important in the public interest, would be amazing to many of you.

I don't want to expose this on the public record today. I'd rather wait until I leave the government and, if necessary, having been an author of five books and about sixty articles, I won't hesitate to make a public record on my own. I will not do this while I am serving as a government official.

I'll only mention one incident. The announcement that I was planning to hold this conference became a very serious subject of confrontation, even agitation, to stop me from holding it. When you get this sort of pressure you have to ask yourself: Why? People only should do things like this, i.e., to seek to prevent the exposure, the opening of a public forum discussion on something as important as our standards system, particularly as it involves international trade, only if they have concerns about changing the status quo.

If that is the case, I could hardly see this as a basis for cooperation, whether it is by the private sector with the government or even among private sector entities alone. I have said in another forum that what I think the private sector in the standards world needs to do is to get its own act together.

I see problems. Many problems. Again I say: Those things enter in my right ear and the other ear like this and there are no problems. But somewhere in the middle I have the feeling that the problems are there and I would hope that the private sector interests would do its part to resolve them in order to save themselves from dire results.

The government has a way of messing things up in this bureaucracy and it does so by legislative routes, by circulars that people find difficult, objectionable, and other ways. But sooner or later it has to respond to the public voice, and it will.

Will the private sector do as well or will it destroy itself because it fails to act? What I am calling for, ladies and gentlemen, is not just government-private sector cooperation but statesmanship. I invite you to show the statesmanship that I heard Larry Hodges in his speech exemplify. I call upon Larry to take the lead. I think he can do it. And some of you out there can help him, and get together and clear up something that will make possible this cooperative effort.

I thank you for indulging me these comments. I felt that this is my contribution that I want to make to the public record before I leave here. If

there is another conference like this in the future, I hope to come down as a private citizen and if it hasn't all been improved by then, I will gladly speak as a private citizen-- and much more openly.

Thank you.

(Applause.)

MODERATOR SIMPSON: I'll ask if there are comments, general comments, and/or suggestion? The first one down there is Bill McAdams and then go back up to, is it Wayne Ellis? Then we'll come back in front.

MR. McADAMS: Yesterday in a weak moment I said before this conference was over I would give something on the order of a position. I really don't want to do that and I am not intending to do it in the sense which I think you might perhaps expect.

But after hearing Larry Hodges and Dr. Forman both talk, I thought I should look over some of my notes and maybe record a few comments for the record which I think we ought to take into account.

I've heard Dr. Forman here repeatedly talk about government-private cooperation and Larry Hodges had talked about that. I think in my paper yesterday I mentioned government-private relationships about a dozen times or so.

We talk about interface with the private sector, in fact the OMB circular first had that word in it. But what we are really talking about I think is a government-private partnership and I think there is a major difference in that term and the others.

It seems to me that when you start thinking in terms of a government-private partnership you have to consider how you might arrive at that and, arriving at that, well, one way of doing it is with legislation. But I don't particularly like that way because once you introduce a piece of legislation I am not sure whatever will happen to it.

On the other hand, we do have to find some way of finding a method of developing a government-private partnership and I think the first step of this has already been taken and I think once we have an implementation plan it will help very much. And I mean the OMB circular.

Now, 23 or 24 agencies of the federal government were able to get together. They were able to agree on a number of things that they were willing to commit themselves to insofar as a private sector standards system was concerned.

They agreed to use the standards. They agreed to participate in the work and they agreed to a number of other things and to me that is quite a major accomplishment.

Dr. Forman said a minute ago that the private sector needs to get its act together and I think what is needed more than anything now is for the private sector to come up with an agreement of its own as to what it is willing to give to the federal government, and, more important, what it is willing to do in the interest of the public service and the public in general has a number of interests in standards which we all are responsible for but which the private sector or the public in general can only have participation by means of our ownelves here.

Now, it seems to me that the next step has to be some method of getting the private sector standards organizations together and to see if we can't propose some way of establishing an equivalent to the OMB circular using the National Standards Policy as a basic document for doing that.

We put a lot of work into that National Standards Policy. I didn't have anything to do with it. I made a lot of comments on it, as I always do on those kinds of things, and I think you all recognize that. But I think that in that policy we outline what the procedures for standards making ought to be; how standards ought to be accredited; how we can work with the government bodies that are concerned with standardization, how we can bring in all kinds of users into the work; how we can have all factors, all factions of society involved.

It seems to me that if we get that act together, as Howard Forman puts it, then we are in a position to take that result and, working with the OMB circular, somehow come up with a national policy which might be promulgated in some way without legislation.

I don't know quite how that can be done but it seems to me that that is the sort of way we ought to approach this subject.

Now, Mr. Moderator, that is a really quick, off the top-of-my-head kind of suggestion and after hearing the proposals throughout this conference, I don't think that I can make a decision myself as to what route is the right one.

I'd like to see Dr. LaQue's paper and particularly the criteria which he has laid down and apply it to the various systems that might be possible. I'd like to see the proposal in detail that Dr. Podolsky has presented. I know that there is a contract involved in that with the federal government. I'd like to see that contract and what it contains -- and the same with all of the other systems that I described in my paper.

I think that once we have an appreciation of all of those and try to put our own act together in the private sector, that we may have a solution to the problem that could work.

Thank you, Mr. Moderator.

(Applause.)

MODERATOR SIMPSON: Thank you, Bill.

Behind you, Don.

MR. ELLIS: Thank you, Mr. Moderator. I am Wayne Ellis. I am Chairman of the Board of ASTM and I would like to make a few general remarks about the conference.

First of all, on behalf of ASTM I would like to thank the Department for calling this conference and I would like to congratulate Dr. Forman and his steering committee on the excellent organization that they developed and the fact that all of the major issues have now been surfaced with respect to international standardization and the participation of the private sector and the federal government.

I think this is the first time that such a conference has been convened and I think it is certainly timely and perhaps it's even long overdue. During the course of the meeting yesterday and today some very nice comments were made about ASTM and its standards and we do appreciate that.

I hope that you have noticed the presence on both days of many officers and members of ASTM which certainly indicates our interest in the subject and our intention to participate in its further considerations.

ASTM has listened very carefully and of course it will consider in the next few weeks what, if anything, it needs to do. I think that we intend to be a part of the proceedings and we will do whatever is necessary to support the government-private sector cooperation that has been the central theme of this conference.

One of the speakers mentioned the national policy on standards as a key to the government-private sector coalition. I think Sandy Trowbridge put it very neatly when he calls for a government-private sector coalition. That avoids the problems with defining cooperation and coordination and such other terms.

Bill McAdams of course has just emphasized that the OMB circular and the national policy on standards are keys to making progress in this whole area. ASTM feels keenly about the need to implement the national policy on standards and indeed ASTM is working, right now, with the executive committee

of the American National Standards Institute to work out some of the problems that ANSI perceives in the ASTM position on implementing a national policy on standards.

As an expression of ASTM's interest in the proper federal government-private sector coordination cooperation coalition, I would remind you that more than a year ago ASTM's Committee on International Standardization took the position of endorsing the concept of a structure for implementing the government-private sector coordination.

I think that that is an expression of ASTM's intent today and we would like to see it take place.

I think it was Dr. Podolsky who first mentioned the possibility of a contract between the Department of Commerce under Title IV of the Trade Agreements Act and ANSI by which ANSI might represent, officially, the United States of America in international standardization.

ASTM urges caution in this regard and we support the remarks just made by Bill McAdams. We feel that no contract should be consummated until it is perfectly clear that the private sector's central body does indeed represent and have the full support of all the constituents in the voluntary consensus standard system.

We think that is essential to making any such agreement work, in fact. So I would just say in summary, Mr. Moderator, that ASTM strongly supports the private sector-government coalition concept and will do everything possible to make it work.

Thank you.

MODERATOR SIMPSON: Thank you.

I think we have a comment down in front, Frank. Dr. LaQue. And then, one up there.

DR. LAQUE: Oh, thank you, Mr. Moderator. My efforts to get the floor are based not so much on the probable importance of what I am going to say but on the fact that I have a plane to catch. But I thought that since the matter of the difficulties in implementing the conversion to the metric system was discussed earlier and since I was involved in the history of the legislation, perhaps a description of what occurred might be helpful.

As you may recall, the first bill dealing with metric conversion was defeated principally as a result of opposition by the Labor movement. In my particular position at the time, which was a matter of coincidence, I got

permission to discuss with the spokesman for the Labor movement the basis for their opposition to the original bill.

I did this and discovered that their opposition was well-founded, that the original bill was quite defective in many important aspects and I agreed that it could be a much better bill.

I must plead guilty to being somewhat responsible for the major change in the bill that actually got passed. It wasn't supported by the Labor movement but it wasn't opposed. I made that deal at the time.

In any event, the major change was the mission of the metric board. The original bill gave the metric board the duty of making the plans for conversion and setting dates for achievement of conversion and I agreed that that was not the best way to do it.

I thought that the plans ought to be generated by the people who would be most affected by it so that the final version of the bill, which got passed, gave the board, not the mission of planning conversion but of over-seeing plans that were to be generated in the private sector.

Subsequently this provision of the bill has been interpreted as denying the metric board any opportunity to stimulate the submission of plans. They have apparently assumed a rather passive attitude and have concluded that they must not deal with anything until it has been brought to their attention.

I had hoped originally that the American National Metric Council would stimulate the submission of plans for review by the metric board. Apparently this has not occurred and I don't know exactly why but I think that the solution of the problem, of why you are not getting further ahead on metric conversion, lies principally in the interpretation of that provision of the bill.

If any Congressional action is required, it could very well be clarification of what they meant by saying that the board had only an overview provision and must not stimulate the submission of plans for their review.

Now, maybe you don't need to have any directive to the board to take a different attitude but perhaps the board itself could decide how to interpret their mandate. I believe what's needed in the expedition of metric conversion and whatever merit it has, lies with the private sector which somehow must come up with some plans for conversion to submit to the board for its appropriate action.

Thank you.

MODERATOR SIMPSON: Thank you. Yes?

MR. THORNTON: I am Doug Thornton. I'm from Ross Operating Valve in Detroit.

As a small manufacturer we came here with the concern of trying to understand how international standards were going to be set up and how the organization was going to develop. We, as a company, have a very real need for an international standard.

I would say that if we look at our exports they are about two times the national average for companies in the international exporting business. We are concerned and are participating in international standards.

One of the things that Larry Hodges said this morning is that the system is fair and I would have to agree with Larry Hodges that the system is fair. It does provide checks and balances. But when you get down in the trenches where the fighting takes place, sometimes the objective is to win, and not how you play the game.

I would strongly recommend to the organizations that do the standards writing that they have a very good inward look to make certain that as an organization they are not dominated by one company, or they are not dominated by one group, and that the delegation which goes to the international meetings to represent the U.S. and present a U.S. position, truly represents a cross-section of the U.S. industry and not the opinion of a significant few.

MODERATOR SIMPSON: Thank you. You have a comment down here?

MR. CUNNINGHAM: My name is Bill Cunningham. I work for the AFL/CIO. I am not really knowledgeable about the full extent of Labor's involvement in the standards setting process but I am involved in the process of moving toward the metric system in the United States.

We are quite involved in that process. I am on the board of directors, as are a number of other Labor people, of the American National Metric Council, and I am quite familiar with the situation there.

We are very happy to be a part of that organization because it gives us some participation and knowledge about industry plans for conversion and it gives us the ability to talk to corporate people and tell them what our concerns are. Our concerns are quite straightforward and we believe that most of those concerns can be handled in a voluntary way, through collective bargaining.

Our concerns are the skill changes, the job changes, and the financial burden that will be imposed on some workers who have to provide perhaps several thousand dollars of tools out of their own pocket.

There is a frustration on the part of those industry people who want to see more active efforts in conversion of the metric system and I think that frustration really is the result of the lack of participation by many people in the private sector and perhaps a lack of real concern.

There is a real difference between the rhetoric and the actual participation. The participation is lagging far behind the rhetoric in which people are saying that conversion to the metric system is the best thing for the country.

There must be about 30 to 50 sectors or committees in the American National Metric Council where the plans are being laid for conversion of various sectors of the industry. A lot of those sectors are really quite inactive because there isn't the participation, but that really is the place where plans should be laid for conversion to the metric system.

It is the place where all the details can be worked out and really sincere efforts are made, and if the participation were there that ought to be there, then we would not be making what has been described as painfully slow steps towards the metric system but we are going to move much more quickly than it has.

On a broader scale, I think that some of the concerns that have been expressed by Labor about conversion to the metric system or standardization in general have been that perhaps this will lay the groundwork for greater amounts of imports and a lot of job displacement because of imports.

It shouldn't have that effect. We know, of course, that there is a potential for greater exports because of the standardization but the feeling is, on my part and I think it is shared by other people, is that the opposition to U.S. exports really doesn't lie upon the grounds of standardization. If we standardize products, then new issues will arise, preventing our exports from going into other countries because we are talking about countries that manage their trade flows, and really aim at keeping out U.S. exports rather than on often spurious grounds of standardization.

So, while we believe that standardization, while I believe that standardization will lay the groundwork for greater imports, it may not have the effect and probably won't have the effect on exports that most people hope it will.

So we could end up losing from standardization because of a lack of overall, a lack of oversight on trade problems in general. It just really isn't the kind of leadership and scrutiny of trade problems that there really needs to be to make standardization decisively beneficial to the American public.

MODERATOR SIMPSON: Thank you. We have another comment down here.

MR. COLLINS: I'm Richard Collins with the Research Department, International Brotherhood of Electrical Workers and I would like to address, briefly, the issue Dr. Forman addressed earlier and that Dr. LaQue referred to yesterday. That's the issue of Labor's evident participation in this conference.

In the spirit of furthering cooperation and the desire to reduce an adversary relationship, I think all parties concerned may have something to learn from the experience and that is that, as a result of the Trade Act of 1979, there is a new relationship between the Department of Commerce and organized Labor and this conference is probably one of the largest areas to come up since that legislation that gives Labor an opportunity to participate and to make its voice heard, get its point of view at least set forth and have an opportunity to dialogue with each other.

As Bill has mentioned and as Liz mentioned this morning, Labor has had a long participation and great interest in the area of standardization. For instance, the International Brotherhood of Electrical Workers has a member on the board of directors of ANSI and also a member on the Metrication Board.

We have been very active in formulating standards in the area of the national electrical code, which affects many of the building codes and related products across this country.

So the point I'd really like to make is that Labor does want to participate and we won't have the opportunity to have an input and we want to know what the ground rules are. When you say: "Propose a speaker," how soon should that be done? When should it be done?

A topic that we would like to present on the program, to get it in soon enough or to get it in too late -- we believe there needs to be some flexibility and some understanding and just to put it on the record that Labor is interested and we want to have the opportunity to have an input, we think, that will be beneficial to all parties concerned.

MODERATOR SIMPSON: Howard? And then we will go up this way.

DR. FORMAN: I want to personally thank the last two speakers. I think you have been very forthright. Your candor is absolutely refreshing and important to me personally and I think to the Department. And it's important to get it on the record.

As to the reasons why we didn't have more time or guidelines, I believe I convened a meeting, it has to be early in June -- no -- it might have been later. It might have been in July. If you have ever tried to prepare or develop a conference of this type, I respectfully suggest that the problems are monumental, and we had to move with deliberate speed. I urged

Dale Dunlop to get back to us in one heck of a hurry. Everyone heard the same message. And I told Ms. Jager over the phone, and she still doesn't understand me. I am sorry she wasn't here before when I pointed out everything but I hope you will explain what I've been saying.

What I heard you say today is the most constructive thing I have heard from your area of our country and I want to speak to that specifically. I have heard you gentlemen say that you welcome and want to, you want to participate in the standardization activities of the United States of America. That is very good.

That is most important because there is a Labor official speaking, one who has spoken publicly for your organization, who has steadfastly said that AFL/CIO does not want to participate, would refuse to participate in standards committees and related activities. The gentleman I speak of is Dr. Sheldon Samuels.

MODERATOR SIMPSON: Howard, I think maybe the Moderator is going to intervene and suggest that we call this issue a draw.

DR. FORMAN: Wait a minute, Dick. I just want to say this because it is important. Just one minute. It is important for the Commerce Department, I think, to have it on the record for the public.

MODERATOR SIMPSON: All right.

DR. FORMAN: Dr. Samuels was a member of the Commerce Technical Advisory Board when I first met him in '76. And I heard him say that he was so fed up with the standards system he was going to do whatever he could to prevent Labor's participation on any standards committee.

I invited him to meet with me. We had dinner together. We talked it over and I urged him to reconsider. My point was this: You do not influence anybody by avoiding meeting with people. It is better to participate and to try to influence others to accept your views, or at least seek compromises that may be acceptable.

If Labor feels that the standards movement is anti-Labor or not cooperative, then Labor should sit on standards committees, should participate the way you gentlemen are recommending, and that is the way that Labor can hopefully win its points.

In return for my efforts and my intentions of good advice, at a hearing at the Federal Trade Commission last year on standards, Dr. Sheldon Samuels appeared and he claimed to speak for AFL/CIO. He named me, and said that I, as an official of the Department of Commerce, blackmailed him. Blackmailed him.

I happen to be a lawyer by profession. Since blackmail is a crime, such an allegation in a public hearing could have caused me to be disbarred. His statement naturally caused me serious concern, even though I was convinced that he was mis-using the word. The reason he gave was that I encouraged him, coaxed him, induced him, to get Labor to participate in standards committees to have its voice heard. He said that I had attempted to coerce him.

With that on the record I wrote a letter to your former president, George Meany, and I asked whether that was the official position of AFL/CIO. I wrote twice. My letters were never answered. I was then forced, in order to clear myself, to go through the Department of Commerce to the Department of Justice, to get a ruling that I was not a blackmailer.

I also went before the District of Columbia Bar Association and the Pennsylvania Bar Association to have it clearly adjudged on the record, in the light of Dr. Samuel's statements and testimony, that when I tried to encourage him to have Labor participate, that this was not coercion, let alone blackmail. That this was cooperation, a good faith effort to try to heal any breach between Labor and the standards people.

Now, it is refreshing and a delight to me personally, and I think I can speak for the Department of Commerce to that extent, I am sure the Commerce Department will be happy, from the Secretary on down, if Labor will participate openly and actively in standards and in anything else with which it has any concerns about -- the standards movement or commerce or the metric system or what have you.

MODERATOR SIMPSON: Right there?

MR. SHAPIRO: Jerry Shapiro. I am President of the Dixo Company. Howard had mentioned that this conference was to bring out problems. I'd like to bring out one of the answers to a problem that was raised yesterday.

One of the people in the audience yesterday talked about the fact that people in small business had difficulty in becoming involved in the standards writing process, in knowing what is going on.

As a small businessman, I think corporately we may be the smallest member of ANSI -- I am not positive and I am not working toward that distinction but we are certainly small -- I have been involved in five different ISO activities and I can tell anyone in Small Business, ISO activities come in from Geneva, ANSI in New York.

ANSI in New York delegates the administration of all the technical committees to various TAGS, Technical Advisory Groups, which find a home with other competent organizations. All of the documents that they need on ISO activities are available at ANSI.

ISO issues an annual report giving all its activities, listing all its committees and subcommittees. It issues a second report on the work of the technical committees giving a list of the technical committee, its subcommittees and its working groups -- all of the items on which they are working and the stages at which they are at, at that particular time and where they were a year before so that you can see the progress being made.

Those reports are all available through ANSI. Every TAG administrator routinely receives from ANSI the annual report issued through Geneva, of the technical committee which details in the minutest detail where all of this can be found.

Whether the TAG administrator feels that this is a lot of paperwork that is of no interest to the TAG members and simply files it, I cannot speak for that point but the information is available. Or you could go back to ANSI.

There is no reason on any of ISO activities to write Geneva. All they'll do is mail your letter to New York. You can get your answer in New York. Certain of the documents unfortunately are for sale because ISO sets a sale price on them but they are usually well within the reach of anyone.

It has never been an impediment to my business to become involved. I have never been refused anything because of the size of our company. We can always get what we need. It is a matter of effort. If you want it to be considered an impediment, being a small business, then it is. If you want to keep trying, you'll find out it isn't.

Thank you.

MODERATOR SIMPSON: On this side.

DR. PODOLSKY: I, too, would like to speak on the problem of small business. I made a reference to it yesterday. It apparently was misunderstood. First of all, in the list of activities for the proposed reconstituted International Standards Council which I presented on behalf of the working group yesterday, we listed as one of the very important and specific responsibilities of that new International Standards Council the support of the interests of small business.

Now, a small business has a very real interest. It has difficulty sometimes being heard, and more importantly being represented, for only two reasons: All of the technical advisory groups, to my knowledge, and I can state positively and specifically for the International Electro-Technical Commission because I know that best, are open to anybody who wants to participate. Even the smallest business; even a one-man business.

I am sure that the same thing applies to the technical advisory

groups for ISO but nevertheless a small business has difficulty. It has difficulty from the standpoint that perhaps its technical personnel, who have the expertise or knowledge to provide input, either don't have the time or if they do have the time they may not have the funds to travel to meetings of the technical advisory group.

More importantly they may not have the funds to travel even if they are selected to be delegates to an international meeting. Now, that problem needs to be solved.

The fact that a member of a small business can't come to a technical advisory group meeting is not a barrier because every technical advisory group which I know receives, in the main, more comments in writing from interested people -- even from the smallest businesses -- of their recommendations and their comments on the specific documents to which Jerry Shapiro just referred.

The documents are available to everybody at no cost. They are privileged to comment on those in writing and every technical advisory group that I know, on any subject, pays attention to the written comments in establishing U.S. positions. A young man who spoke here from a small business, I believe a valve company, said that he thought that people from small business ought to go as delegates to international meetings.

In fact, they do go. Many of them go. I know that the executive committees that are responsible for both IEC and the ISO activities try to find, for the United States, the most qualified technical individual to go to an international technical meeting to present a United States position.

There are always two difficulties: To have adequate input from the members of the technical advisory groups to establish the position and, secondly, to get the most qualified man as the United States delegate to go. Many times he does come from a small business. Sometimes he comes from a college or university. There is no basis for financial support.

Now, that problem has never been completely solved. We have stated specifically two of the most important responsibilities of the new International Standards Council of the finding of ways to assist small business and also finding ways to support people who come from the academic atmosphere who have no other basis for financial support to participate in this when people from those organizations are in fact the best qualified representatives to the United States.

The system as it now operates does not exclude anybody. Anybody who wants to participate can do so and I think what needs doing in the new organizations is simply to encourage that and enlarge it.

MODERATOR SIMPSON: Thank you.

Any other comments? All right, down here in the corner and then we'll go up there. You can ask questions of the speakers, you don't have to confine yourself to comments.

MR. NORRIS: Mr. Chairman, I think the Conference is getting better by the minute. I would like to make a suggestion that would help the interests and desires and the concerns, perhaps to a degree, of small businesses that has worked in the area where I have worked for about 15 years, in the standards area.

Many times we have been confronted, questioned by small businesses. In my travels I have been questioned: I didn't know this was going on. Can I get involved? In trying to pursue an answer it seems to me that, well, it seemed to me some years ago that possibly there was a breakdown or an absence of communication.

As you explain the process to many businesses -- and not all of them small -- who are not actively involved and haven't been by past experience in the standards area, you tell them, for example, that their interests may well be covered, as I just did so with one gentleman here today.

Their interest may be covered by an industrial or a professional association which is currently, actively involved in the standards area where I am involved, for example, and I am sure of this in other areas as well. Suggest to them that they check with those organizations or associations.

If they are members they will find them, and I have these people come back to me repeatedly and say: Oh, yes, I didn't realize. We are members of that organization but I didn't realize they were so actively involved. Then we suggest, and I have many times: Why don't you have your organization include this in its house organ or its newsletter?

In a number of these cases I do receive these house organs and newsletters and over the years I have seen this materialize and it does work and it does help a lot and it gets the word out to more and more businesses in America -- that they do have exposure. Their interests are being addressed; but sometimes they are not aware of it.

So, perhaps some of the organizations or associations here might take this to heart and think in these terms and report back through their house organs and through their membership what is going on in that standards area.

Thank you.

MR. GAY: I'm Greg Gay. Office of International Conferences at the State Department. Our office is engaged in the business of accrediting and,

to a limited degree, funding delegates to international conferences.

Now, the difference between what you have been talking about here and what we do is that these are intergovernmental conferences and our delegates go cloaked in the mantle of being accredited United States Government delegates.

That, however, does not preclude a large participation from the private sector in these meetings and in hearing about the problems you foresee in cooperation between private sector and government, I would like to suggest that it might also be helpful and instructive to look at some other facets of government activity, in cooperation with the private sector where things seem to have worked quite well.

There may be some parallels that would be useful and instructive for this effort. In my own experience I am thinking of the ITU and the participation of the tele-communications industry in this country in the CCITT and the CCIR committee meetings. This goes on under the cloak of the United States government but there is a very heavy participation in the private sector and I think that it might be a useful comparison against which to look at what you are doing here.

MODERATOR SIMPSON: Thank you.

Other questions, comments, and/or suggestions? We have one down here and then we will go up to the right. Down here first.

MS. JAGER: I just thought I'd make a couple of comments about some reactions that seem to have been developing. First of all, I think the Conference has come an enormously long way. It started yesterday morning with discussions of government-industry cooperation. We've now moved to government and private sector cooperation.

It's now clear that it includes organized Labor and our long-standing interest in these problems is being welcomed. I am sorry about whatever flap developed between Dr. Samuels and Dr. Forman. I don't know about it. I will look into it.

I think the record shows that organized Labor has been and remains willing to cooperate with almost every group that has a purpose that we view as a public purpose. That leads me to the other two points I wanted to make: One is that I would hope that some of the concerns about standards in relation to other countries and in relation to business and Labor here, would begin to raise some of the questions about differences that came out in the first paper when the spokesman from J. I. Case mentioned the fact that the German system is very different from ours.

I am sure that all of you know that one of the reasons that most countries operate differently from the United States in the field of almost every international trade question is that most of them have primarily either state-run or state representation on their business entities.

This has increasingly been the way of the modern world. In this country -- it's one of the few countries in the world where, I think the trend has not been in that direction and I suspect that that factor needs to be addressed, if you are going to try to examine the impact of standards on the private sector.

I think the dialogue has been started here and I think that's good. I think it's terribly unfortunate, still, that we emphasize the standards instead of the impact of trade because I think all of us have much to learn about the interaction of the two and until that problem is addressed, I suspect you are going to have too many confrontational situations and, as I think everyone agrees, it would be more useful if we did not have confrontations, rather we should have cooperation.

My last point is that I am terribly impressed with the very real concerns expressed by the smaller corporations about their inability to participate in all of these meetings and I would like to state for the record that if they think they have problems taking care of all of these meetings, I wonder if they have ever thought of the problem of representatives of organized labor who are trying very hard to represent their organizations and simply cannot be everywhere at the same time.

So if we've missed some deadlines, I apologize for it. I think while it's hard to plan a conference, it's hard to be everywhere at the same time.

MODERATOR SIMPSON: Thank you.

Down on this side?

MR. ODELL: My name is Don Odell. I represent myself on this, I guess. There was a concern yesterday on the obligation of the United States to accept an international standard.

I don't think it was a clear decision on whether we had to or did not have to. A point I have in mind is in fabric flammability. Dick, you are aware of the child sleepwear. ASTM developed an apparel flammability test which I think the Canadian government is considering for a child sleepwear test and yet just two months ago I, as a member of a TAG group, looked at a third test.

It was a British test for an international standard. I found nothing

wrong with the test but I would certainly not propose that the United States take it over. I would go with the ASTM or stay with what we have to stay with, the mandatory standard.

So I am concerned that we have to establish what our obligations are when we get involved in international standards. I would hate to think that as a member of ten people of a task group that we could dictate to the United States what we are obligated to. That's almost more power than the President.

MODERATOR SIMPSON: This is the only legitimate time as an impartial moderator that I can react to a question. I think you posed the question based on my former role as the CPSC Chairman. Again, let me rephrase your question: What are your obligations under the GATT standards code again, under Title IV of the Act?

The obligations are the same under the GATT code whether the question has to do with fabric flammability or the question that was raised yesterday on particular food products. There is an absolute escape hatch in the GATT standard code that says each nation reserves the right to set the levels of health and safety on behalf of its citizens. That's a national decision. It's something that you're not going to delegate to an international forum. What the GATT recognized is that countries could use the health and safety escape hatch to, in fact, artificially and unnecessarily adversely affect trade. They recognized that you could use the guise of a health and safety standard as an instrument of trade policy.

If the United States adopts a CPSC-developed standard and ISO proposes a different one and CPSC doesn't adopt it, the ISO version, and a trading partner says: Foul. You're in violation of the GATT code. You should adopt it, the international standard. CPSC says: Health and safety standards are different. And why. And that's it. Nothing happens.

The obligation is to explain.

MODERATOR SIMPSON: Down here in front.

MR. HAWKINS: I have two things that I'd like to point out to you. My name is Harold Hawkins. I'm from Columbus-McKinnon Corporation in New York.

The first one is of a rather narrow scope. I've participated in international standards work for approximately ten years and have worked very hard on a number of national consensus standards committees. My principal axe to grind, and the thing that I would like to get home to you people is that one of the most difficult jobs that we have is to keep the standards committee on the track of developing performance standards.

I had the occasion of being associated with an international standards committee where the French Secretariat was completely redesigning every one of the widgets in the whole world and obsoleting all of the tooling of the whole world and spent perhaps four or five years doing this before I came along, got mad, got the papers rolling through ANSI to get a plenary session called of that TC committee and got the whole thing stopped.

Then the French Secretariat halted for two years before they did anything. I have seen the same kind of thing occur in the national committees. They tend to do a tremendous engineering design and outdo the whole world. So much for trying to speed up the standards work.

The other thing that I'd like to point out to you is that as I go home from this meeting I find that I am going to have to do a little special homework. I'm going to have to get the OMB circular out and read it carefully to see how it can apply, specifically, to our problems.

I'm also going to have to get hold of this National Standards Policy and read it carefully, and then I think that each one of us here ought to, before this month is up, if we can possibly do it and get it in, in time, -- send in our succinct feelings on this because what you people are going to do is leave this room this afternoon and create a big vacuum if you don't do what I'm suggesting.

Before the end of this month, if that is the time scale we must meet, we are going to have to come in with some collective ideas from all of us so that the people who finally boil this down come up with what we really want.

It's obvious to me as I stand here and talk to you that as industry we'd like to keep this thing in a frame where we have at least a moderate amount of control over it, and if we don't do our homework the rest of this month we aren't going to have that happen. I can you tell that.

(Applause.)

MODERATOR SIMPSON: Any other comments? Suggestions? Yes? Down in front.

MR. DUTTON: I'm John Dutton of General Electric. I've been listening with much interest these last few days and I listened with great interest as my friend Harold here spoke of our homework.

I share his opinion, but as I contemplate this I feel a bit of a handicap in having listened to, what is it, eight or ten wonderful papers. Interesting papers. But I haven't been able to absorb all of them. Is it in some way possible to get copies of those papers before these thirty days expire so that they can be digested at leisure and commented on more deliberately?

Thank you.

MODERATOR SIMPSON: I'm going to ask Dr. Forman to respond to that and perhaps at the same time he can tell us how he proposes to deal with the suggestions and ideas that have been expressed here.

DR. FORMAN: First of all, with regard to the proceedings. In your program you have a note from me making suggestions -- since I'm verbalizing, vocalizing, I'll say I am literally pleading with you, not just requesting or suggesting. If you've got something to say, please say it. Otherwise the conference only does part of the job. I'm going to take the liberty of again repeating -- Ms. Jager you know I've said this in letters to you and I've said it over the phone -- I know you've got a position. Don't lose out on the opportunity. Don't wait for us to try to figure out what you want.

You've got some erudite people who could write papers. Write them and get them into the record. And the same goes for small business and everyone else. As Harold just said before: If you don't do your homework and get it in to us, we can't do anything for you. That's our job.

We're supposed to listen to you and try to respond to the public. Now, this is our plan. We suggested that it's thirty days that you come back to us with a statement, a letter. You can state that you wish to have it published or you do not wish to have it published. That's your privilege.

If you don't state that you do not want it published, it will be published. It probably will be in Volume I of the proceedings. By Volume I, I mean we contemplate at least a Volume II. We've already put out a call for papers. I think we have already received either eight papers or abstracts, from people who feel that they have something to say in this area, the subject of the conference, and want to take the trouble to state a position and to make proposals.

This is by way of building up this data base that is so important. I said somewhere in this conference, I think maybe in yesterday's opening, that this should only be considered the beginning, the consideration of problems that are just coming to light.

Most of us don't even understand the problems. Things have happened so fast in so many ways -- as you have been hearing for two days. So the dialogue should be kept on. It should be the Commerce Department's responsibility to maintain it after I'm gone and others carry on the work of our office. I hope it will be done with your encouragement.

Sometime down in the future, possibly another such public conference. Maybe more workshops. Maybe sometime an annual report to the public, if that is what is desired or needed. You've got to tell us. I, having lived on both sides of that mythical wall between the government and private sector, have tired of hearing "we" and "they." I have always felt that if the public

spoke there ought to be people in the government who should listen and hopefully respond, but if you sit on your hands, then you've got your own selves to blame.

Anyway -- details. We hope to get our proceedings published. I haven't asked the Reporter when we will get her papers back but after we get the transcript I feel we owe it to those who are formal speakers to give them a chance to review and edit their own comments because sometimes things don't always appear in print the way we would like, or we change our minds.

We won't give the people in the field, the questioners, that opportunity but certainly we will give it to the speakers.

With regard to releasing copies of the papers that were already submitted, which we have, I decided this was not a good thing to do for two or three reasons, one of which is: I've already had at least three speakers tell me that they either had corrections to make or something came up where they'd like to change a statement and I think they should have that right.

To put out copies of papers before they are final in the sense of their papers, would be incorrect and would do all of you a disservice. There is no sense sending out papers, having them quoted, commented upon, until the authors have had a chance to say: This is it; publish.

Secondly, there is only a limited number of people here. We sent letters about this conference, I think to over 4,000 people on various lists. And of course we only have 500 seats. Maybe that's the deterrent. Whatever it is, I feel that there are many people who also would like to have copies of the papers and we ought to make them equally available. This is the way we try to operate. Everybody gets the same opportunity. Nobody gets preferential treatment.

When we come out with the proceedings it will be published. Everyone that is registered with the conference will get a copy. A notice will be in the Federal Register so that others can procure copies, probably through the National Technical Information Service. They'll have to buy it; but they will have it available.

I think that's the honest and fair way to do it.

Now, with regard to your concern, which I think is a very reasonable point -- you would like to be able to react with some understanding of the papers rather than what you were able to do in two days of notetaking. I think the way to handle that is in our second volume which will come out -- maybe we'll set a date thirty days after those proceedings are published.

Then you can write in another letter or a formal paper or whatever, and that will be published. We will not edit your papers. We do not censor

what you write. What we would suggest, however, to save you and me some tax dollars we've asked the speakers to prepare their papers in what we call camera-ready form.

I'll be happy to send you a thing our printers have provided us with, which is a sort of, well, it gives you dimensions, and spaces, and so forth. Single line and that sort of thing. Then if you send it in and you want it published, we can save a few dollars by not having to have it redone, retyped or something like that. Because we're only going to photograph it.

Does that answer your questions?

QUESTION: How can we get a copy of Dr. Podolsky's paper?

DR. FORMAN: ANSI will provide it, I guess. That's up to Dr. Podolsky. I think any speaker could provide the paper on their own. I just don't think we should do it.

QUESTION: We're all going to be calling ANSI for a copy of Podolsky's paper.

MODERATOR SIMPSON: Just so we keep the record straight, would everybody identify themselves?

Let me ask the question so that it's for the record: Do we understand that Dr. Podolsky has no objection to having his paper made available? Yes, or no.

DR. PODOLSKY: Dick, it requires more than that, if I may have a word?

MODERATOR SIMPSON: All right.

DR. PODOLSKY: First of all, I have no objection whatsoever to my paper being printed and circulated anywhere. I've already sent it to Dr. Forman in camera-ready form. It can be printed and circulated.

I recommended yesterday, however, that you request from ANSI a copy of the working group's report which is substantially more extensive than my paper. My paper is a summary. It omits some very important considerations, some very important background facts which led to the conclusions and recommendations of the working group.

I'm sure that Don Peyton is here. He can confirm that ANSI will be glad to make a copy of that working group report available to anybody who requests it from ANSI and I recommend that you get the working group report

rather than my paper because it is more extensive, more explicit.

MODERATOR SIMPSON: I think we're getting into details. My understanding is that if you want a copy of Dr. Podolsky's papers -- and he in addition suggests that you ask for a complete copy of the report which gives you a more complete understanding -- that you can request it from ANSI. And I think everybody knows the address and telephone number.

(Inaudible question.)

I understand there is a question: How do we get copies of the National Standards Policy? Can we assume, well, let me ask Don Peyton: Would you like to comment on that?

MR. PEYTON: Yes, we have lots of copies. The thing was published with the Standards Reporter. We have many, many reprints of it. All you have to do is write us a letter and request that it be sent to you.

MODERATOR SIMPSON: All right. How do you get copies of the OMB circular? No one has asked that yet.

MR. PEYTON: That's somebody else's responsibility.

MODERATOR SIMPSON: Dr. Forman?

DR. FORMAN: I'll answer your question specifically but I want to honor a suggestion made by this gentleman right down there, whose name I do not know. Would you identify yourself again? You're from GSA, aren't you? The fellow up front there. With the mustache. No, it wasn't you. Sorry.

Anyway, during the lunch break it was recommended that when we put out the proceedings we should include in it a copy of the papers that have been cited, such as: The OMB circular; these, well, the NSPAC; the GATT; and so forth.

Now, there are some costs involved there. We would have to get into that. All I promised was that we would give it serious consideration.

But let me ask you, while you are here as a group, do you think that that is essential? Really important to have it as part of the proceedings?

MODERATOR SIMPSON: Yes, Mr. Dutton?

MR. DUTTON: I have examined the Trade Agreements Act of 1979, certain parts of it, in quite great detail. You might want to consider reprinting Title IV which is not too long. But there is a great deal more

besides that which I don't think would be of too great interest to this group.

MODERATOR SIMPSON: Thank you. If anyone wants to get a copy of Title IV and/or the OMB circular, let me just make a suggestion. Write to the Commerce Department, Howard Forman, and request a copy under the Freedom of Information Act and they'll be obliged to send it.

(General laughter.)

If you can't think of any other way to get it done, write to OMB.

DR. FORMAN: Don't use the Freedom of Information Act. That costs you, the taxpayers, hundreds of dollars for us to answer. Just write me a plain letter without the FOIA.

MODERATOR SIMPSON: See. Just write him a letter and he'll send them to you.

Any other questions? Comments? Suggestions?

Hearing none, and seeing none -- Yes? Mr. Randolph?

MR. RANDOLPH: Bill Randolph. Food and Drug. I have just one minor suggestion. After the proceedings have been made available, and Howard indicated that they will announce that in the Federal Register, I would suggest that the period for submitting comments be at least sixty days.

Through long experience at Food and Drug and we have found that something that is as extensive as the papers that are covered here, particularly for most organizations, it is very difficult for them to get comments together and get them cleared through their organizations and reviewed.

So I would recommend a sixty day period for getting comments in -- once the collective papers are available.

I am also delighted that Howard is giving us a chance to correct our remarks because in Hank Thomas' paper I only made one change and I blew it and stuck the word "proposed" in front of the National Standards Policy, not realizing it has already been adopted by ANSI.

MODERATOR SIMPSON: Thank you. My understanding is that sixty days will be allowed. Seeing no other suggestions, as the Moderator, let me thank you all for attending. You made my job real easy.

Thank you. The meeting is adjourned.

(Whereupon the meeting adjourned at 3:50 p.m.)

APPENDIX I

FORMAL PAPERS PREPARED BY SPEAKERS

BEFORE THE CONFERENCE

Note: The speakers were required to submit their papers before the Conference with the understanding that papers could be of any length and format the authors desired. They were at liberty to present the same paper or a consideration of it at the Conference, provided they did so within the allotted 30 minutes time for each presentation. The papers which follow are the pre-Conference submissions which in most cases cover the points that may not have been made during the course of the authors' verbal presentations.

Comparative Analysis of International

Standards Activities

W. A. McAdams

The United States has been involved in international standards work for well over a century. In the beginning most of these activities were initiated by newly formed professional societies composed of technical experts from government, industry and academia. Their main goals were to establish better understanding of new scientific discoveries and to develop safe and practical methods of applying them.

Standards became one of the basic tools for accomplishing these goals. In at least some of the major fields the standards development actually started at the international level before or about the same time as at the national level.

International trade has always been one of the incentives for international standards, but that incentive has now become much greater for our trading partners than for us. This is because their exports are much higher in relation to their gross national product than ours; an average of 15 to 25% for them vs. 6% to 7% for the U.S. This is one of the main reasons why foreign governments and their national standards bodies work so closely together.

International standards are obviously now becoming more important in international trade. The GATT Code on Technical Barriers to Trade is probably the best indication of this. Taking this Code into account, along with the U.S. trade deficits in recent years, it is certainly time for a review of the U.S. participation in both the development and application of international standards.

This analysis can be considered a part of such a review.

Some Comments on This Analysis

The purpose of this paper is to examine and compare the international standards systems of the United States and its principal trading partners. For the most part, the paper will describe only the international organizational structures of the national standards bodies and their relationships with their national governments. In the time available to prepare this paper it was not possible to obtain adequate information on the procedures and practices used for participation in international standards activities. It was also not possible to fully appraise the extent of our need for participation in international standards bodies other than the ISO and IEC, or the manner in which such participation should take place.

A more comprehensive comparison of the U.S. and foreign methods and procedures for participation in ISO and IEC programs may be necessary later. The same is true for the handling of relationships with the many other international organizations involved in the development and use of standards. In the meantime, we need to determine the serious weaknesses in the present U.S. system. In developing improvements we may need this extra information to assure that any new system we create will be workable and provide the benefits desired.

The International Standards System of the United States

Since the purpose here is to compare the U. S. system with that of other countries, it is appropriate to examine the U. S. system first.

The American National Standards Institute (ANSI) has assumed the leadership of the U.S. system for participation in International Standards work. ANSI has assumed this international role under a constitution approved by its members who are mostly private companies and associations. It has been the member body of ISO since ISO was organized in 1947. The U. S. National Committee of IEC (USNC/IEC) a special committee of ANSI since 1977, has been the U. S. member body of IEC since IEC was organized in 1906.

ANSI has never been formally recognized in any way by the federal government but many representatives of branches of government are active in ANSI's international standards work. The federal government has also never provided any regular financial support for ANSI although it does make grants from time to time for support of U. S. participation in international projects in which it has a special interest.

The ANSI Board of Directors has established an International Standards Council (ISC) that is responsible for ANSI's administrative policies in international standards bodies.

Under a special section of the bylaws, the Board of Directors of ANSI also has an Executive Standards Council (ESC) which, in addition to management of ANSI's national standards work, is responsible for U. S. participation in the technical work of ISO. The ESC has a number of Standards Management Boards to assist it.

Under a special section of the bylaws, the Board of Directors of ANSI has delegated all responsibility for participation in IEC operations to the USNC/IEC, but requires the USNC to coordinate its policy decisions with the ISC and its technical matters with the ESC.

ANSI has no well-defined procedures or organizational processes for review of the broad ISO programs and policy proposals. The ISC is charged with this responsibility, but often does not have the documents in time for an adequate review by the ANSI members affected or, in some cases, even by the ISC members. However, ANSI does have a Consumer Council and a Certification Committee that are able to give competent advice on ISO programs in these areas.

U. S. Policy positions are better developed for the IEC. The USNC/IEC Executive Committee has frequent meetings that are open to all USNC members and they are able to take part in the discussions on all the policy matters, as well as the technical committee problems in which they are directly involved.

As stated earlier, ANSI has had no formal recognition by the federal government. However, joint discussions between ANSI and some branches of the government during the last few years have resulted in several cooperative arrangements for the development and use of ANSI approved standards by these government bodies. ANSI has also established direct liaison with a number of other government agencies. The ANSI Bylaws provide for a Standing Committee on Government Liaison and Support to assist in these programs and to develop mechanisms for improving the ANSI relationships with government at all levels.

Many of the ANSI international programs and operations may be affected greatly by one or all of three national documents that have been issued since early 1978. These are, of course:

- The National Policy on Standards
- OMB Circular A-119 on Federal Participation in the Development and Use of Voluntary Standards
- the GATT Code on Technical Barriers to Trade and Title IV of the Trade Agreements Act of 1979 on the application of the Code.

We should keep these documents in mind as we compare the ANSI system for international standards work with that of other countries.

Selection of Trading Partners for Comparison

For this brief analysis it seemed practical to select only a few of our trading partners for comparison. The two best examples are Canada and West Germany and they will be analyzed carefully since they illustrate some major differences from the U.S. and most other systems.

Canada

The Standards Council of Canada (SCC) was established by an Act of Parliament in 1970. It was given the responsibility to coordinate both national and international standards activities. It is a government-private corporation, funded by parliamentary appropriations through the Ministry of Industry, Trade, and Commerce. The Council has 57 members, six from the federal government and 10 from the governments of the provinces. The other members are a reasonable cross-section of private interests.

The Act gives SCC the authority to represent Canada in the ISO, IEC and other "similar" bodies. The Canadian National Committee of IEC has become an arm of the SCC and represents it in the IEC. The SCC has formed a similar National Committee of ISO. These two National Committees direct the Canadian participation in ISO and IEC. The committee work is handled by advisory committees much like those we have in the United States.

In 1977, the National Committees of ISO and IEC recommended and the SCC established an Advisory Committee on International Standards (ISAC). ISAC deals with questions common to both ISO and IEC and is a forum for discussion of the international standards problems of concern to SCC. ISAC is composed of the Executive Committees of the Canadian National Committees for ISO and IEC.

One other feature of the Standards Council of Canada is very important in this comparative analysis. The Council responsibility extends into the federal government. As a result the Canadian Government Specifications Board (CGSB) is now an "accredited standards-writing organization" of the SCC and its standards are recognized as "National Standards of Canada" in the same way that standards from private bodies are recognized. The standards of CGSB are comparable to those of the U.S. General Services Administration. This arrangement, therefore, assures a much closer tie between the government and private sector than we have in the United States.

There is no question that the formation and operation of the SCC has greatly improved the Canadian participation in ISO and IEC. Of course, the government funding (100%) is a significant factor in this.

West Germany

In 1975, the Federal Republic of Germany signed a contract with the German Standards Institution (DIN). The Contract is the envy of many other national standards bodies and a new approach to governmental relationships with private bodies for the development and use of standards. Here are the main provisions of the Contract:

The Federal Government agrees:

1. To recognize DIN as "the competent" standards organization for West Germany,
2. To recognize DIN as the National Standards Body in non-government international standards organizations.
Note: The Association of German Electrical Engineers (VDE) became affiliated with DIN through an agreement completed in 1970. VDE continues to operate the German National Committee of IEC under this Contract.
3. To give DIN the opportunity to develop standards with a priority schedule on subjects the government believes are needed for the public good,
4. To apply DIN standards in government operations wherever practicable, and
5. To provide financial support within the available resources of the federal budget.

Note: At present the federal support is about 15% of the DIN budget. Since DIN is a very large organization, this would be equal to or greater than the total ANSI budget.

In return for these commitments, DIN agrees:

1. To operate with procedures that consider the views of all interested parties,
2. To guarantee that its published procedures will be followed by its member organizations,
3. To ensure that its standards are suitable for reference in government documents,
4. To give preferential treatment to government requests for standards.
5. To withhold publication of DIN standards in disagreement with a regulation being issued by the government, and
6. To assist the government in its obligations under GATT and other international agreements in the field of standards.

This is obviously a very comprehensive contract and certainly one of the best examples of government recognition of a private national standards body. It has also been accomplished without formal legislation as has been done in Japan, France, and some other countries. There are contracts or other kinds of agreements in operation among other of our trading partners, e.g. in the UK and Scandinavian countries, but they do not cover the many obligations that this West German one does.

In comparing the German arrangement with the U.S. system we should not overlook the U.S. documents I mentioned earlier. The OMB Circular, the Trade Agreements Act, and the Proposed National Standards Policy all contain provisions that equal many of those in the DIN/German government contract.

Comparison With Other Trading Partners

Practically all our leading U.S. trading partners have strong international standards programs that are carried out with a better government-private interface than we have in the United States. Most of the governments have either approved legislation or taken other actions that give special recognition to the national standards bodies. In many cases the government relationship with the standards body includes at least some of the features of the Canadian and West German systems. It is worth looking at several of these to see the similarities.

United Kingdom

The British Standards Institute is a corporation operating under a Royal Charter granted in 1929. It has remained independent and in 1942 was officially recognized by the government as the "sole organization" for issuing standards having national application. The charter and official government recognition is considered to cover international as well as national standardization activities. BSI is governed by an Executive Board with 27 members including 3 from branches of government.

BSI has long been one of the most influential organizations in both ISO and IEC. The British National Committee of IEC operates through the BSI Electrotechnical Division.

The government provides about 25% of the BSI income by matching funds from non-government sources. The government relies heavily on the voluntary compliance with BSI approved standards including international standards that BSI finds acceptable. In comparison to the United States, there are few UK standards laid down by law.

France

Most of the French standards system operates under the French Association for Standardization (AFNOR), that was recognized by a statute issued by decree in 1941. AFNOR has the status of a private body under the statute and in 1943 another decree declared AFNOR to be in the "public interest".

The 1941 decree also reaffirmed the government "Commission on Standardization" and provided for other independent private organizations called "Standardization Bureaus" to develop standards in specific fields, but these standards have to be approved by AFNOR to become national standards. The Commissioner on Standards gives official status to the standards, verifies compliance with them, and sees that there is proper participation in international standards work.

AFNOR is the French member body of ISO, but the French National Committee of IEC is a part of the Technical Union of Electricity (UTE) which is a separate body from AFNOR.

The French government provides 50% of the AFNOR income by means of a special industry "tax". The UTE receives 50% of its income from Electricite de France, the public electric utility company of France, 10% from the public telecommunications companies, and 40% from private industry. The French accept many international standards, especially those of IEC.

Sweden

The Swedish Standards Institution (SIS) is a nonprofit organization incorporated by private law; it received a charter ratified by the King in 1958. It is the official member body of ISO.

The Svenska Elektriska Kommission (SEK) acts as the Swedish National Committee of IEC. It has its own constitution but is affiliated with SIS as its Electrotechnical Division.

The Swedish government provides about 30% of the SIS income. The SEK obtains most of its income from sales of publications and contributions from private industry. The government pays SEK an amount equal to 60% of the private contributions.

Like France, Sweden uses many international standards, including a high percentage of those of IEC.

Japan

The Japanese Standardization work is carried out under the Industrial Standardization Law of 1945 (with later revisions). The law provides for a Japanese Industrial Standards Committee (JISC) which is the organization for developing Japanese Industrial Standards.

JISC was designated as the representative of Japan in ISO and IEC by decisions of the Cabinet Council in 1952 and 1953 respectively. Practically all expenses for participation in ISO and IEC are paid to JISC by the government.

A Spécial Problem With Our European Partners

Almost all of our Western European trading partners are deeply involved in regional standardization activities that the U.S. must take into account. These are the activities of the European Committee on Standards (CEN), The European Committee on Electrical Standards (CENELEC), the European Commission for Conformance Certification of Electrical Equipment (CEE), and the European Economic Commission (Common Market). We should keep in mind that nearly all the Western European countries are participating in the standards work of these organizations, and the amount of work is huge.

The representation in CEN is about the same as for ISO. The representations in CENELEC and CEE are the National Electrotechnical Committees. Many of the documents produced by these three bodies are being sent to the EEC for consideration as Common Market Directives. The EEC representatives all come from government, so there has to be close liaison between the EEC government people involved in each country and the national standards groups doing the work in CEN, CENELEC, and CEE.

All of this means that our trading partners in Western Europe have an added incentive for international standards work - the unification of Western European standards. They consider this work their highest priority and have put in place highly competent, well-supported systems to bring this about.

Conclusion

This comparative analysis does not begin to identify all the differences between the U.S. approach in international standards activities and those of other countries. It should be considered only the start of the more comprehensive study that is needed.

MAJOR PROBLEMS IN INTERNATIONAL STANDARDIZATION

BY L. JOHN RANKINE

Presented at:

Department of Commerce Conference on
International Standardization
Washington, DC
October 15-16, 1980

In accepting the invitation to speak at this conference, I was faced with the dilemma of just what aspect of international standards to talk about. Fortunately, Dr. Forman and the organizers made that decision for me by assigning me the topic, "Major Problems in International Standardization."

What are the major problems in international standardization? What should be done to solve these problems? These questions are simple enough to ask but, as is most often the case, difficult to answer. The situation is not unlike the one faced by the golfer who teed up the ball, missed three times, hit it on his fourth swing, and then turned and said, "This is a difficult course, isn't it?"

For those of us involved in international standardization, and there are many of you here at this seminar today, international standardization is a difficult course. Lately, in the United States, too much time and effort has been spent missing the ball by questioning the U.S. voluntary standards system which supports U.S. international standardization activity and, I feel, not enough effort has been devoted to hitting the ball--playing the difficult course.

Today, at the risk of going over par, I would like to play that difficult course for you. Not in my capacity as the Director of Standards and Data Security for IBM nor as an ANSI Vice-President nor as Chairman of ISO/TC97 on Computers and Information Processing, but rather from the personal point of view of an individual who has been involved in international standardization activities for more than a dozen years. However, as some of you know from my accent, I am a Scot by origin; and it has been said that a Scotsman is the only golfer who won't knock a ball out of sight.

It is certainly not my intention to try to do that with you today in discussing international standards, but the analogy to the game of golf is appropriate because I personally feel that the problems we face are not the golf clubs we are using, that is to say the standards organizations or the existing mechanisms in the U.S., but rather the way we swing, the way we play the course, that is, our own actions. When I speak of "our own actions", I mean the collective activities in the United States represented by users, producers, consumers, and government, both the public and the private sector. That's what determines the effectiveness of the U.S. on international standardization turf. What concerns me most and from what I often hear from many of you, is that today our own actions, our effectiveness, has been weakened by a lack of cooperation between the groups interested in standardization, particularly between the public and private sectors. What has resulted is a polarization that serves only to weaken the work being done so diligently by so many individual U.S. participants who provide technical expertise to the international standards projects in which they participate. Frankly, too often we are playing in the rough; and when we do, everyone suffers. What needs to be done is to get the ball back on the fairway.

Some of you will probably say that this outlook is far too optimistic and conservative and that I am avoiding some real problems in the system as it exists today. I hope not, for this is not my intent because I believe there is a very real problem in the system as it exists today. For the most part, however, I do not perceive this to be a problem of

organization or with the system itself; and I don't want to see us waste national resources on, as someone once said, "fixing what ain't broke." The problem exists in ourselves. Ever since I had the privilege of entering the field of national and international standardization, I have held the belief that the real problem rests not with our system but with ourselves. I believe the U.S. has today within the government and the private sector all of the mechanisms which it needs to maintain its leadership in the field of international standardization.

The need is for all of us to work together to make sure that the existing mechanism works superbly well. The national interest is best served when all of the parties involved work cooperatively, and it is diminished when individual interests and ambitions are allowed to run free in continually proposing new mechanisms to satisfy individual whims and ambitions over national needs and interests.

The international standardization course is difficult enough to play, but some claim that what is needed is to redesign the course--move the tees and move the greens--by merging ISO and IEC into one organization. I can't help but question what that will really do to improve our score, to strengthen the U.S. influence and effectiveness in international standardization. It is frequently argued that these organizations are duplicative and that if they were merged there would be very considerable economies to be obtained.

I had the pleasure of chairing an ad hoc study group of the ANSI International Standards Council last year which addressed this question. I believe the ad hoc group was correct in recognizing that gradual steps should be taken to establish common procedures and strengthen working relations so as to converge ultimately on a single international voluntary standards organization. In essence, the recommendations made by the ad hoc group were evolutionary rather than revolutionary; and I would commend them to those of you who might be interested in this aspect of streamlining international standards affairs.

After careful study by the group, however, it was also decided that the problems were more perceived than real. ISO and IEC were developed in their own realms for pragmatic purposes which, by and large, they still serve quite well. While there are undoubtedly some economies to be obtained as a result of a merger and a need exists to shorten the time it takes to develop international standards, basically the same topics and committees would have to exist. While some duplication could be eliminated, it is still doubtful that very substantial economies would be obtained.

Others complain that the U.S. is forced to play the course with an undeserved handicap--that the U.S. does not have a strong enough voice in the international voluntary standards system because (1) the system is essentially a European club, and (2) the U.S. government is insufficiently involved in the process.

As far as the voluntary standards system being a European club, we must bear in mind that a club is what its members make it. By their proximity to Geneva, there is no doubt that the European nations can and do play a very strong role in both ISO and IEC; but this is not to say that the U.S. is on the outside looking in. For example, the current President

of the IEC is from the United States as is the Assistant Secretary-General of ISO. Since its inception, the U.S. has held a seat on the governing body of ISO and also on its Executive Committee and Planning Committee. Furthermore, some years ago, ISO initiated a Long-Range Planning Committee on which ANSI was most active. The Pacific Area Standards Congress (PASC), a very influential body in helping assist the affairs of ISO, was also initiated by ANSI action. In addition to many other benefits, PASC provides a mechanism for Pacific Area countries which are distantly located from Geneva to get together, exchange views, and decide on common actions which can help strengthen the operations of both ISO and IEC.

On the question of U.S. government involvement in the international standards process, it seems to me that the U.S. government has been very properly and fully involved over the years. A former Deputy Assistant-Secretary for Product Standards was, not too long ago, the President of ISO and before that, he held the positions of President of ASTM and also ANSI. I speak, of course, of Dr. Frank LaQue.

The U.S. input to the objectives of PASC, which had its initial meeting in Hawaii, was drafted by a U.S. Trade Representative, a former Deputy Assistant-Secretary for Product Standards, and a member of ANSI. Over the years, U.S. government officials have been involved in ANSI delegations to PASC and to ISO Council. Officials of the U.S. Department of Commerce and the office of the U.S. Trade Representative have made many distinguished contributions as members of the ANSI International Standards Council and through their key positions in the GATT.

At the technical committee level, the U.S. government has provided equally distinguished service. Scientists and technical personnel of the National Bureau of Standards have made excellent contributions through their work on standards committees worldwide. In the field of information systems with which I am most closely involved, NBS personnel have chaired for many years the U.S. technical subcommittee on data elements and also the international subcommittee, as well as the U.S. subcommittee on computer interfaces.

These U.S. public and private sector initiatives and areas of cooperation have placed the U.S. second to none in the field of voluntary international standardization. There is no country in the world that has not made use of U.S. national standards--standards which in many cases have become ISO and IEC standards, as well as the national standards of other nations. Who in the international standards world has not heard of the standards of ASTM, UL, NEMA, ASME, IEEE, SAE, U.S. federal government, etc.?

Yet I often hear that the U.S. must reorganize and pattern itself along Canadian, German, or some other type of standards organization. In this world, there are many cultures and ways of doing things; and we can certainly learn from them all. But different cultures grow in different ways and from them evolve different systems and ways of doing things for the most part based on very sound and good reasons. That is why I feel that the best safeguard for protection of U.S. interests is to strengthen the U.S. member body in its role in both ISO and IEC. A strong, effective ANSI supported by all interested parties is the way to play the course--the way to improve our score. The U.S. voluntary standards system with

its built-in checks and balances of government, user, consumer, and producer involvement is a unique system which has evolved sensibly to serve our nation well, nationally and internationally. Certainly let us look at the Canadian, German, British, French, Italian, and whatever other systems there may be and learn from them whenever and wherever we can. But, in the final analysis, let us do it in the U.S., the U.S. way, to best serve U.S. needs.

I feel like I've played the "front nine", the first part of the course, now let me try to work the rest of the course and end up back in the clubhouse. If my play so far seems to give strong support to the need for confidence in the people and the organizations that are in place today working in support of international standardization, then I feel I'm playing my game at par because that's exactly the way I see the situation.

That is all very fine some may say, but things have changed. We now have a GATT code of standards, and there is a Trade Agreement Act. You have to redesign the system to meet these new requirements. Frankly, I have great difficulty in understanding why. The U.S. voluntary standards system is entirely consonant with the spirit of the GATT code; and as far as the Trade Agreement Act is concerned, it provides a mechanism to fill a valid need. Namely, for the Secretary of Commerce to identify specific situations where the U.S. government needs to be involved on a case-by-case basis in order to enhance the operation of a system which the Act itself regards as generally adequate and, in several aspects, more than adequate. As such, the Act is a good example of the U.S. system evolving and adapting as it should to enhance government and private sector cooperation in meeting international requirements. The Act as I see it is designed to facilitate government participation with and in the U.S. voluntary standards system as it exists; and as such, it does not require the system to be redesigned to fit the Act.

Support of the system as it exists today has never been, and should not become, a burden to the taxpayer or a government bureaucracy that requires tax dollars to sustain it. In this respect, the U.S. government must be cautious in its desire to give support. At present, in the United States having an organization such as ANSI has made the U.S. participation in international standards financially possible, technically viable, and overall very successful.

I encourage you to join with ANSI in its efforts to improve our play on a difficult course. In doing so, I am reminded of the young man who was being initiated into the mysteries of playing golf and who asked the club pro, "Which club do I use to make a hole in one?" No such club exists, it never has, and probably never will. But given a dedication to a truly cooperative working spirit amongst all interested parties, there is no doubt we can continue to be winners nationally and internationally.

The United States federal government should determine where the existing voluntary standards system can best utilize government support to assist on a specific case-by-case basis where there is clearly a proven need. Next, there is a need to continue to enhance the current government, organizational, consumer, and producer interfaces via ANSI with the international voluntary standards system by optimizing working relationships

among all involved as opposed to redesigning the system.

After all, the real test in the game is not keeping out of the rough all the time, but getting out after we are in. None of us wants the U.S. to be like the golfer in the rough who asked the caddy, "Why do you keep looking at your watch?" "It isn't a watch sir," said the caddy. "It's a compass!" That's really the challenge we face; and if we each approach our responsibility pragmatically, patiently, and cooperatively, if we have the vision to see beyond the limits of our personal interests, if we have the wisdom to take national actions rooted in reality, we can ensure a style of U.S. leadership in international standardization which will serve not only ourselves but all of mankind.

A PROPOSED NEW STRUCTURE FOR U. S. PARTICIPATION

IN VOLUNTARY INTERNATIONAL STANDARDIZATION

Leon Podolsky

The world of international standardization has changed drastically in the past several years, due both to governmental pressures in many countries and the increasing needs of world trade. The impact of standards and certification systems on trade, and the growing potential for technical barriers to be erected, has stimulated both national and regional organizations to pay critical attention to these problems.

The culmination of several years of concern and effort was the Code of Conduct on Standards and Certification that was concluded as part of the MTN Trade Agreements Act of 1979, and to which the U. S. is a signatory. The Trade Agreements Act of 1979, passed by Congress, in its Title IV, imposes on the Department of Commerce and the U. S. Trade Representative very substantial responsibilities for cooperation in, and support of, the international voluntary standards activities of the U. S.

Now, both by international treaty and U. S. law, there is for the first time in history, both a recognized need and a legal basis for private sector and governmental agency cooperation and support for international standardization effort.

Such cooperation is essential to the health and continued growth of U. S. foreign trade. It is vital to the preservation of existing markets for U. S. goods in competition with other developed countries, and it is even more vital to the trade opportunities in the developing countries. Our international competitors have lost no time, and are sparing no effort, to make the weight of their standards preferences known and felt throughout the world. We have already seen the great intensification of their effort in the ISO and the IEC.

For 75 years the U. S. has participated and led in international standardization in the electrical and electronic fields through the U. S. National Committee of the IEC, which is now a wholly integrated body of ANSI. For nearly 35 years, since its inception, we have participated in the other fields of international standardization through the ISO. ANSI is the U. S. member body of both the ISO and the IEC, and both organizations, by statute, require such a single member body in each participating country.

The participation of the U. S. in these organizations, supported wholly on a voluntary basis by industry, has generally been effective and competent. However, there are some gaps and uneven applications of national interest and support depending on how vital particular industries see their international trade opportunities, or, conversely, the possible adverse impact of standards of competing nations.

There are, in addition to ISO and IEC, several other international voluntary standards writing organizations, and a substantial list of governmental treaty organizations which write international standards, where neither the voluntary sector nor government have participated adequately or effectively.

The pressures of the GATT Code, the OMB Circular A-119, and the requirements of Title IV of the Trade Act of 1979, have dictated a new look at how the U. S. should be structured for proper participation and management of our international standards efforts.

ANSI, the coordinating body for its federated members in international standardization, promulgated a new international standards policy in December, 1978, which carefully addressed both the responsibilities of the voluntary sector and its relationship to the governmental treaty systems. I will not detail that widely published policy here, but refer to it in this paper as Appendix 1. At the time of publication of that far reaching policy, the GATT Code had not yet been developed, Congress had not yet considered the new trade bill, and the OMB Circular was only in beginning stages.

The finalization of all three of the latter documents led the ANSI Board of Directors to instruct its International Standards Council to study in depth the ANSI structure necessary to carry out its responsibilities for international standardization, in the light of these documents, the basis of financing the proper activities, and most importantly, the proper interface and relationship of ANSI, representing the private sector, to the federal government.

The ANSI International Standards Council is an appointed body of representatives of ANSI federated members and certain governmental and individual experts. It is an advisory body to the ANSI Board of Directors. The ISC acted on its charge by appointing a working group to carry out its assignment.

It was my honor and privilege to be named chairman of that working group, whose other members were:

Dr. Lawrence D. Eicher, NBS
 Dr. Howard I. Forman, DoC
 Mr. C. Ronald Lowry, AIA
 Mr. Jerome B. Schapiro, Dixo Co.
 Mr. G. T. Underwood, Deere & Co.
 Mr. R. J. Szydlowski, (Ex Officio) GM
 Mr. Vincent Travaglini, DoC

The working group met five times over the period from December 4, 1979 to July 15, 1980, to consider proposals and working papers submitted by its members. The working group arrived at unanimous conclusions, with a separate concurring report by Dr. Forman. (A copy of that separate opinion is attached at the end of this paper.)

The working group has submitted its report to the International Standards Council, which has approved its Purpose and Scope, and submission of these recommendations to this national forum for public review and comment. In December, these recommendations in final form will be submitted to the ANSI Board of Directors.

This is most important. We believe that what we have proposed is a new dawning of international standards effort by the United States, a Magna Charta of a new cooperative relationship between the private sector and government to more efficiently coordinate, operate, and financially support our international standards work in the best interests of all concerned national entities.

The principal findings and recommendations of the working group, as given in the executive summary of its report are:

1. The Working Group found that the present structure and support of ANSI for International Standardization is not adequate, in view of its increasing responsibilities and the required close working relationship with the Federal Government to implement Title IV of the Trade Act of 1979, the GATT Code, and the OMB Circular A-119.
2. The Working Group recommended a new structure for the ANSI International Standards Council to make it a strong Policy and Operating Committee, with joint voluntary sector and government membership, reporting to the ANSI Board of Directors.
3. The detailed structure and charter of this new ANSI International Standards Council are still under discussion. They can be summarized as follows:

3.1 PURPOSE: To promote the development and use of standards which best serve the common needs of the U. S. Government, General Public, Industry, Technology, and international trade. In pursuit of these interests the ISC shall encourage and support the development of standards which have the potential for worldwide acceptance by virtue of their technical excellence and the quality of practical international acceptability.

3.2 SCOPE: The ANSI International Standards Council is to be the policy and operating body of ANSI for all international standards activities, including relationships with the federal government.

3.3 The proposed membership shall consist of not more than 30 members representing the following presently identified constituencies:

- (a) Councils, boards, and committees of ANSI, (i.e., Executive Standards Council, U. S. National Committee of the IEC)
- (b) Representatives of the major standards developing organizations
- (c) Consumer interests
- (d) Certification and testing bodies
- (e) U. S. Department of Commerce
- (f) Other departments and agencies of the federal and state governments
- (g) Academic institutions
- (h) Small business interests

All members are to be nominated by the constituencies they represent, in accordance with due procedures to be established. The rules will determine the numerical representation for categories.

The proposed officers and terms of office are detailed in the full report.

3.4 The functions of the new International Standards Council are to perform and have responsibility for, or the delegation of, the following:

- A. The implementation of the ANSI international standards policy, as set by the ANSI Board of Directors, in all its aspects, including the interfaces with government under the Trade Act of 1979.
- B. The identification of those international standards organizations in which it is in the national interest for ANSI to hold membership, and to qualify for and participate in such membership.

- C. To determine the private sector organizations and entities in the U. S. having interest in or being affected by, the identified international standards organizations, and to insure their participation in and support of U. S. activities therein.
- D. To develop and secure publication of information on international standards activities.
- E. To organize committees, task forces, and other structures, necessary to the establishment of U. S. positions on international standards matters.
- F. To identify and nominate competent U. S. delegates to meetings of international standards writing organizations and committees.
- G. To assist small business organizations in their input to international standards matters.
- H. To determine the costs of U. S. participation, adequate representation and other costs. To develop ANSI budget recommendations.
- I. To make recommendations as to costs which might be borne or supported by government under Title IV of the Trade Act of 1979. To work with ANSI in developing proposals to government agencies such as the Department of Commerce or Office of Trade Relations for such support.
- J. To develop systems for international standardization and the required input and coordination with national standardization.

3.5 The ISC will be required to report its activities semi-annually to the Board of Directors of ANSI.

The ANSI Board of Directors should periodically review the membership of ANSI in international nontreaty standards organizations. Responsible government agencies should do likewise with respect to treaty organizations.

4. The Working Group recommended that the first function of the new ISC, after establishment of the operating rules, should be the development and conclusion of a Formal Agreement between the Department of Commerce, and ANSI, as a Private Sector Federation of Standards Developers and Users. APPENDIX 2 shows an example contract.

The working group considered several approaches to achieve the kind of relationship and support needed from the Department of Commerce, and believes that the proposed agreement is the most practical approach to take at this time. It has the advantage that it could be implemented relatively expeditiously and bring about needed improvements in the nation's standards activities in the near future.

5. The Working Group concluded that to be fully effective in the international sphere, U. S. international standards activities must be based on an effective national standards policy and organization.

While it was outside its own scope, the working group urged the separate ANSI Working Group on Implementation of the Proposed National Standards Policy to give consideration to a new ANSI structure as shown in Figure 2, with a possible and suggested national sector coordinating committee structure as shown in Figure 3.

These would result in essentially a new ANSI structure, with coordinated national and international standards councils. These structures may, or may not, be ideal, but they do indicate a basis for greater coordination of national and international standards activities.

The working group clearly highlighted the critical need to coordinate both American national and international standards activity in a single body such as ANSI.

All present, and everyone throughout the nation interested in a strong and effective structure for U. S. participation in international standards activities, are urged to obtain and study carefully the full ANSI report.

The working group remains in being, and is anxious to hear your discussion today and to receive your constructive suggestions. These will be considered and included in a final set of recommendations to the ANSI Board of Directors at its December, 1980 meeting.

Now is the time for all elements of the private or public standards communities to provide their input and support to this new initiative.

APPENDICES TO THIS REPORT

- APPENDIX 1 . The ANSI International Standards Policy
- APPENDIX 2 - A Proposed Formal Agreement Between ANSI and
the Department of Commerce.
- FIGURE 1 - Proposed Membership Constituencies of New ISC.
- FIGURE 2 - A Possible New Structure to Correlate National
and International Activities
- FIGURE 3 - Possible Organization of National Sector Coordinating
Committees.

APPENDIX 1**ANSI International Standards Policy**

Approved by Board: December 1978

It shall be the policy of ANSI to be the national coordinating and operating body of the voluntary standards system of the U.S. for all functions in relation to international voluntary standards organizations, such as ISO and IEC.

Further, it shall be the policy of ANSI to offer its assistance to government agencies in carrying out their responsibilities in international treaty organizations concerned with standards, and related questions such as quality assurance and certification, insofar as ANSI's coordinating role for the voluntary system can be helpful to such government agencies.

To carry out these policies ANSI shall:

1. For the Voluntary System

1.1 Become directly, or through its agencies, the official U.S. member of international voluntary standards bodies, and accept the responsibilities concurrent with such membership.

1.2 Seek to determine the appropriate U.S. industry sector having major interest in specific standardization activities of the international organizations, and obtain their sponsorship and financial support for such activities before committing U.S. participation in specific areas.

1.3 Inform the U.S. voluntary standards community through appropriate publications, meetings, seminars, etc., of international standards activities and the progress of particular programs.

1.4 Encourage information interchange systems with the international voluntary standards systems, and with other national organizations, so that a direct information base on international voluntary standards is available in the U.S.

1.5 Establish and maintain such staff, personnel, and procedures as shall be necessary to the foregoing.

1.6 Establish and/or administer policies, procedures, and financing programs which may be necessary to ensure that the U.S. is adequately represented in international voluntary standards development programs, and that the U.S. positions in these programs represent the consensus of the U.S. consumer, government, producer, and other interests.

2. For the Governmental Treaty Systems

2.1 Provide the mechanism for liaison with government departments and agencies in the work of treaty organizations

2.2 Organize and conduct meetings and seminars, when requested to do so by government agencies, to provide a forum for discussion of programs or cooperative assistance between the voluntary and governmental standards interests.

2.3 Accept, subject to approval by the Board of Directors, assignments under contracts, grants, or other activities or coordinating functions from governmental agencies.

2.4 Publish, insofar as it is of interest, timely information for the benefit of the voluntary standards community regarding governmental treaty standards activities which may have impact on the voluntary system in the U.S.

3. International/National Interface

3.1 Encourage consideration for adoption in the U.S. of international standards where no national standard exists.

3.2 Encourage alignment of national and international standards provisions or reference to international provisions in cases where national standards continue in use.

3.3 Having given due consideration to existing national standards, encourage governmental bodies to adopt or reference the latest version of international standards where applicable and appropriate.



APPENDIX 2

PROPOSED FORMAL AGREEMENT

BETWEEN

THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ON BEHALF OF ITS FEDERATED MEMBERS

AND

THE DEPARTMENT OF COMMERCE

1. PURPOSE

This agreement provides a basis for cooperation and coordination between the Department of Commerce and American National Standards Institute, a private sector federation of standards users and developers, which is the official U.S. member body representative in ISO and IEC. It recognizes that standards are an inherent, vital element of international commerce and the desirability of presenting a stronger, unified U.S. standards posture to the world. It aims to: improve the process by which a U.S. consensus with regard to standards activities is developed; better focus responsibilities based on cooperation and genuine partnership at both policy and working levels; and provide for better visibility and planning of standards development efforts on a national basis. It sets forth a mechanism to achieve a broad based consensus of mutual aims, priorities, and strategies. It recognizes the private sector's financial and other contributions in the national interest, to the development of voluntary standards, as well as the Federal Government's responsibility to make similar contributions, on an equitable basis, in the public interest.

2. DOCUMENTS INCORPORATED BY REFERENCE

Title IV, Trade Agreements Act of 1979

OMB Circular A-119, "Federal Participation in the
Development and Use of Voluntary
Standards"

NSPAC National Standards Policy (Except Section VI)

ANSI International Standards Policy

ANSI Constitution

DoC/NBS Organic Legislation (Parts)

3. RECOGNITION OF ROLES AND AUTHORITIES

The Department of Commerce takes note of the fact that the American National Standards Institute (ANSI) is constituted so as to serve as a private sector federation of standards development and user organizations for coordinating and accrediting private sector standardization activities, and for ensuring adequate private sector representation in international nongovernmental standardization activities.

ANSI and its federated members, in accordance with the NSPAC (National Standards Policy) and OMB Circular A-119, assume responsibility for full consideration of the public interest in all of their standardization work and to use their best efforts to ensure that standards developed within the voluntary consensus system are appropriate for governmental use in procurement and regulatory applications.

4. FUNDING AND OTHER GOVERNMENT SUPPORT

The intent of Congress as set forth in Public Law 9639 is to provide appropriate funding support of international standards and related activities of the private sector, insofar as they are consistent with national needs. Further, the complex interrelationships among national and international standards, private and treaty standards, and standards developers and users, all affect U.S. interests in varying ways and degrees. Thus, it is appropriate that government participation in, funding support of, and coordination and planning with the American National Standards Institute be fostered and maintained on the principle of mutual cooperation but without dominance by the government.

Further, direct financial support of ANSI international activities shall be provided by the Department of Commerce whenever and to the extent considered appropriate, consistent with national needs and a determination by the Department as to what is an equitable share of the overall cost of such activities in the public interest. Such funding will be by grant by the Department of Commerce, under the provisions of Section 415 of Title IV of the Trade Agreements Act of 1979. It is not intended to replace or reduce other Federal agency funding or other support of individual ANSI programs or activities. It is intended, however, that the aggregate of all Federal financial contributions to ANSI, in any calendar year, will never exceed one-half of the total ANSI budget for that year.

5. PROVISIONS FOR CROSS-REPRESENTATION

ANSI and its federated members will provide opportunity for and actively seek the full participation of representatives of the Federal Government in standards development committees, planning and coordinating groups, and advisory councils, both domestic and international, consistent with the provisions of OMB Circular A-119 and within the limits of their missions, authorities, and resources.

6. OBLIGATIONS WITH RESPECT TO THE DEVELOPMENT AND USE OF STANDARDS

ANSI and its federated members, in accordance with the National Standards Policy of the National Standards Policy Advisory Committee (NSPAC), will undertake to ensure that, whenever feasible, voluntary consensus standards are available or will be developed to meet the standardization needs of the Federal Government.

Consistent with OMB Circular A-119, the Department of Commerce will encourage maximum use of voluntary standards for Government standards needs.

7. INTERNATIONAL STANDARDIZATION ACTIVITIES

With reference to Title IV of the Trade Agreements Act of 1979 (Public Law 9639), ANSI, as the National Member Body of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), assumes responsibility for ensuring that U.S. trade interests are adequately represented in these and other international nongovernmental standardization organizations, and will actively seek Federal participation and support for this work.

In carrying out their responsibilities in intergovernmental standardization activities, the Department of Commerce will encourage all interested departments and agencies of the Federal Government to seek advice and assistance from ANSI and its federated members and within the limits of their authority, missions, and resources, to participate in the representation of U.S. interests in international nongovernmental standardization issues.

8. INFORMATION ACCESS AND EXCHANGE

ANSI and its federated members undertake to ensure access to all information relating to its standardization activities to any interested party.

The Department of Commerce undertakes to encourage all interested Federal departments and agencies to provide all relevant information relating to their standardization needs, responsibilities and activities to ANSI and its federated members.

ANSI and the Department of Commerce agree to jointly support a single central reference collection and library which will contain, in accordance with Title IV of the Trade Agreements Act of 1979 and OMB Circular A-119, information on all standards and standards-related activities, both national and international. The National Bureau of Standards, at which this central collection and library will be located, will serve both as the Standards Inquiry Point, under the Trade Agreements Act of 1979, and as the U.S. member, designated by ANSI, of the ISO International Standards Information Network (ISONET).

9. U.S. JOINT STANDARDS CONFERENCES

ANSI and the Department of Commerce agree to jointly sponsor a U.S. Joint Standards Conference at periodic intervals to:

- o Provide a national forum to identify and consider issues of common concern;
- o Ensure full and open communication between the private voluntary standards community and the Federal Government;
- o Provide a mechanism for establishing a consensus on a National Standardization Program Plan;
- o Evaluate the effectiveness of this agreement in helping to meet the standardization needs of the Federal Government and the U.S. private sector.

Organization of the Conference, planning and continuity shall be accomplished through two standing committees, one for policy and another for operations. Both committees will consist of no less than ten, nor more than twenty, members. Half will be from Federal Government and half from the private sector. Members will be drawn from various affected interests and as a minimum a balance of standards developers and standards users shall be a primary consideration. Federal Government members will be appointed by the Department of Commerce in coordination with other concerned government agencies. Private sector members will be appointed by the ANSI Board of Directors. The Secretariat function for the Conference and its Committees shall be jointly shared by ANSI and the Department of Commerce. Identification and discussion of significant issues is one of the primary aims of this process and essential step to broad, cooperative consideration and resolution of problems involved in standardization and related activities.

9.1 Policy Committee

The Policy Committee will address broad, basic questions and trends that could impact, positively or negatively, U.S. standardization interests. The committee will identify and prioritize policy issues, and cause a National Standardization Program Plan and issue papers to be developed or revised for consideration at each Joint Standards Conference. A special responsibility will be the periodic assessment of U.S. standardization capabilities and requirements, and the definition of funding needs and opportunities.

9.2 Operating Committee

The Operating Committee will organize and coordinate the preparation of a National Standardization Program Plan. Utilizing input from appropriate standards organizations, industry sectors and government agencies, the proposed National Standardization Program Plan will assess data and statistics to identify the magnitude of the U.S. standardization effort, major benefits and important trends. The Committee will seek to identify those technical fields that require special attention or support to assure that critically needed standards are available in a timely fashion. Periodically, the Committee will meet with interested parties to address fundamental and recurring issues such as standards as non-tariff trade barriers, certification, consumer participation, etc. These consultative planning meetings will be open to all parties to express their views.

The output of the Operating Committee will be issue papers and a new or revised National Standardization Program Plan. These will be utilized as guidelines to their activities by the Policy Committee, ANSI's Board of Directors and appropriate Government Agencies. The primary forum for consideration of these documents will be the U.S. Joint Standards Conferences.

The Operating Committee will be responsible for planning and running the Conferences. Issue papers and the new or revised National Standardization Program Plan will be widely distributed prior to each Conference and participants will be afforded opportunities to debate, revise or take other appropriate action so that the Conference results in a series of well considered national positions on major standardization issues, or - at a minimum in those cases where consensus can not be achieved - identification of areas of agreement and disagreement.

10. RELATIONSHIP BETWEEN THIS AND OTHER AGREEMENTS

Without prejudice to the validity of this agreement, separate arrangements or agreements such as contracts, grants, and administrative service fee payments may be concluded directly between ANSI or any of its federated members and any Federal Agency.

11. TERMINATION OR AMENDMENT OF THIS AGREEMENT

This agreement is a period of three years from the date hereof. Either of the parties may terminate the agreement at any time, providing that 90 days written notice of intent to terminate has been given. This agreement may at any time be amended with the consent of both parties and with due regard for public review and comment. The agreement may be extended or reviewed for a mutually agreed upon term of years, provided that the extension or renewal is done by a written instrument signed by or on behalf of both parties no less than 90 days prior to the expiration of each expressly stated term of the agreement.

FOR THE DEPARTMENT OF COMMERCE

(s) _____ (date) _____

FOR THE AMERICAN NATIONAL STANDARDS
INSTITUTE

(s) _____ (date) _____

FIGURE 1

The proposed membership shall consist of not more than 30 members representing the following presently identified constituencies:

- (a) Councils, boards, and committees of ANSI, (i.e., Executive Standards Council, U. S. National Committee of IEC)
- (b) Representatives of the major standards developing organizations
- (c) Consumer interests
- (d) Certification and testing bodies
- (e) U. S. Department of Commerce
- (f) Other departments and agencies of the federal and state governments
- (g) Academic institutions
- (h) Small business interests

FIGURE 2

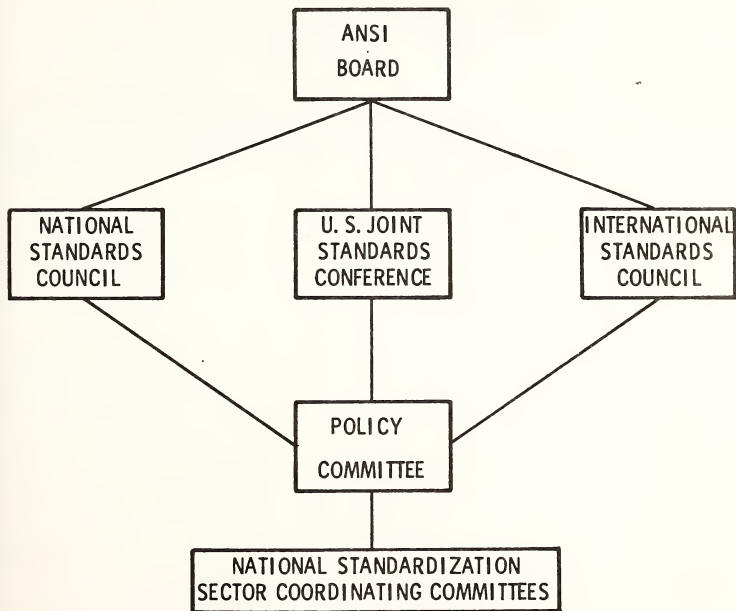
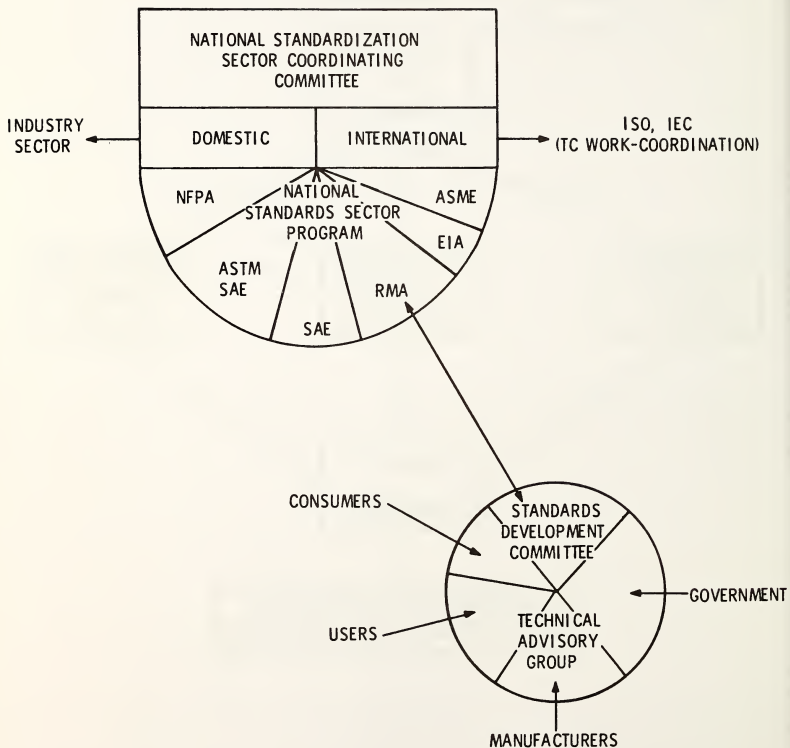


FIGURE 3





UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Productivity,
Technology, and Innovation
Washington, D.C. 20230
(202) 377-9111 3221

July 23, 1980

Separate, concurring opinion by Howard I. Forman
regarding the Report of the International Standards
Council Working Group on Revision of the ANSI
International Standards Structure

The following is an expression of my personal views, as a member of the
Working Group, and is in no way to be considered a statement on behalf of the
Department of Commerce, or of any of its substituent units, or of any of its
officials.


Having attended all but one of the Working Group's meetings, and having reviewed the various documents submitted by some of its members for consideration, I am of the opinion that, on balance, the Group's report and recommendations (as arrived at in its meeting on July 15, 1980) are reasonable and are deserving of serious consideration by all of ANSI's organizational elements, its federated members, the Department of Commerce, and the public at large.

As a former member of ANSI's Board of Directors, as a long-time member of its International Standards Council, and otherwise in connection with my official duties in the Department of Commerce, I have good reason to find myself in agreement with the report's constructive critique regarding ANSI, its relationships with elements of the private sector standards community, its strengths, its weaknesses, and its need to strengthen its capability for serving the nation's best interests in international standardization and related matters. I have been particularly impressed with the candid analysis by the Working Group which has led to the observation that among the causes of unrest and lack of support for ANSI by some of its major constituent organizations is the fact that they have rather limited roles in ANSI's policy developments, and because of this they are not supportive of many aspects of ANSI's general practices and functions on the national as well as the international level.

Obviously, more than one approach is available for attaining the desired objective of improving ANSI's capability and performance. The approach recommended by the Working Group has one important advantage over others that were considered, namely that if it can be made to work it can be put into effect relatively expeditiously. Moreover, if, after a reasonable trial period, it is found irremediably wanting in important aspects, consideration should be given to replacing it by some other approach based upon experience gained and lessons learned in the interim. My own strong preference, if another approach proves to be needed, is that of a quasi-public corporation established by Federal legislation, e.g. the concept of an AISI (American International Standards Institute).

Clearly, several significant hurdles remain before adoption of the Group's recommended approach. Obviously, it must be approved by the present ANSI International Standards Council and ANSI's Board of Directors. More important will be the need to obtain the "consent of the governed," i.e. the consent of the members of the ANSI federation. Once all of these approvals are obtained, any initiative to obtain acceptance by the Department of Commerce of the proposed agreement between the Department and ANSI will be more likely to succeed. If any opposition to the proposed agreement is expressed by a sizeable bloc of ANSI's constituent organizations, or challenges are raised by them as to ANSI's representation on their behalf as set forth in the proposed agreement, the Department may not find it in the public interest to enter into the proposed agreement. Presumably, if the Department does not enter into the proposed agreement, many of the benefits which the Working Group believes will result from the approach it has recommended will not be forthcoming. It, therefore, would appear to be essential that ANSI's Board of Directors do everything it can to persuade ANSI's constituent organizations to support the approach recommended by the Working Group, including the proposed agreement with the Department of Commerce.

In conclusion, I wish to express my admiration for the dedication of the Group's chairman, Dr. Podolsky, in particular, and to the other members of the Group for their forthrightness in developing the views and recommendations set forth in the report. I am confident that all contributed to the ultimate result of the Group's efforts with one objective uppermost, namely to propose ways and means to improve the voluntary standards system in the U.S. and its ability to cope with international standardization problems and related matters.



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cc: Dr. Jordan J. Baruch

OPTIONAL MECHANISMS FOR
DEALING WITH INTERNATIONAL
STANDARDIZATION REQUIREMENTS OF U.S.A.

by
F. L. LaQue

Dr. Podolsky has described a proposal for the restructuring of the ANSI International Standards Council designed to enable ANSI to do a better job in attending to the needs of the government and the private sector in the field of international standardization. This proposal has considerable merit. However it appears to be in order to examine the proposal in relation to other approaches that have been suggested over the past several years but which have not been implemented for one reason or another. It is conceivable that such an examination could provide a basis for arriving at some substitute for, or modification of, the proposal described by Dr. Podolsky that would serve the national interest in an even better way.

Following are some basic requirements that are essential to the successful operation of any organization able to foster U.S.A. interests in international standards activities. They should be employed as the criteria by which any proposal for improving such activities should be evaluated. These criteria, which are not necessarily listed in order of importance, are as follows:

1. The organization must be able to deal with national as well as international standardization, since it will have to make use of the same people in intertwined activities.

The set-up should be designed to insure the marshalling and most effective use of competence from both the private sector and government sources with minimum duplication of efforts.

2. It should be able to accredit sources of standards qualified to become U.S.A. National Standards and to help in combining these private sector standards with standards issued by government agencies to form a complete body of U.S.A. standards identifiable as such for the benefit of anyone in the world who needs this information along with guidance to sources of these standards.

3. An ability to represent U.S.A. interests in treaty as well as non-treaty international standardization activities.

It has been customary to assume, if not apply as a rule, that standards organizations in the private sector should confine their activities in international standards to those connected with matters not covered by international treaties. In many instances the distinction between non-treaty and treaty related activities is more a matter of form than of substance. For example, the International Organization for Standardization (ISO) has liaison arrangements with 350 other organizations. These include many international bodies such as the United Nations World Health Organization (Codex Alimentarius) and the Economic Commission for Europe of which the U.S.A. is a member. It follows, therefore, that any U.S.A. institutional arrangement that may evolve must be able to help with treaty as well as non-treaty matters. An immediate example of the former is the recent GATT Code.

The governments of other countries involve their national standards organizations in implementation of this code.

4. A readily identifiable presence of the government in representation of the U.S.A. in international standardization administrative and technical activities. This is in line with the role of standards and related testing and certification activities as instruments of U.S.A. commercial policy.

5. Provision for financial as well as technical support by the government of both the administrative and technical aspects of representation of the U.S.A. in international standardization programs.

6. Appropriate means of dealing with concerns and perhaps, administrative and technical activities, of state and local regulatory bodies using standards for reference in codes and other regulations as these may be affected, for example, by implementation of the GATT Code.

7. A policy for operations that would minimize and, preferably, exclude more than temporary direct involvement of the organization in the development of standards in competition with standards organizations in the private sector able and willing to satisfy a national need. There must be no invasion of revenue of these organizations from sales of their standards.

8. Details of organization and operations compatible with the rules and procedures of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

9. Expressed confidence in the organization on the part of the government and of standards organizations in the private sector whose combined efforts must be administered and coordinated properly in order to do what has to be done.

10. Existence as a quasi-governmental or quasi-public entity with a Federal Charter so as to insure ready visibility of a government presence and continuity of financial and technical support as required by criteria (4) and (5).

Since I have been concerned in one way or another with the several approaches to this matter that have been suggested during the past twenty years I find it most convenient to examine these proposals in relation to the several criteria in a sort of narrative style, using the first person. No importance need be attached to my personal involvement in any of the approaches to be examined. I have tried to appraise them objectively.

My decision to include historical details of some of the approaches to be examined is based on my conviction that whoever may become involved in what I hope will be an effort to make use of the several inputs to this conference, should be made aware of the climate in which these matters have been treated in the past, and which may prevail in the future. This refers particularly to the probable attitude of ANSI and its present Executive Vice President in the form of persistent resistance to proposals, from sources outside ANSI, calling for more involvement of the government in ANSI's affairs. Historical references to individuals are made with a good deal of reluctance and without impugning their motives or their right to the positions they have taken in particular instances.

I could sum this up by saying that I shall try to "tell it like it has been and like it is."

Report of the Commerce
Technical Advisory Board
Panel on Engineering and
Commodity Standards - 1965

This panel had a task force under the chairmanship of Mr. Charles Mapes of the American Telephone and Telegraph Company, concerned particularly with international standardization.

The panel recommended that the then existing American Standards Association be used as the nucleus of a new institution having a similar mission. It recommended, further, that this institution, now renamed the American National Standards Institute (ANSI), be created by legislation with a Federal Charter and be given official government recognition as being the representative of the U.S.A. in ISO, IEC, and the PanAmerican Standards Commission (COPANT). This recommendation was never implemented.

There was specific exclusion of "activities subject to international treaties or pursued between the Department of Defense and friendly foreign governments related to mutual defense."

The report recommended financial support of the Institute by the government thru dues for memberships to be held by government agencies plus direct financial support thru the Department of Commerce, National Bureau of Standards. Such direct financial support "was not (to) exceed that portion of the total budget of the Institute for that year assigned to international activity or one third of the total, which ever is greater." The government's direct support would be zero if the support from industry and the other sources should be sufficient to make direct government financing unnecessary."

Participation by the government in the management of the Institute "at the policy level should be by representation on its Board of Directors or equivalent body, to an extent that should be neither less than one tenth nor more than one third of the total membership of such Board." The government representatives would be appointed by the President from government sources concerned with standards.

The Institute should leave development of standards to organizations working in this field. It should become involved directly only when necessary and only temporarily, in development of standards, pending assignment of continuing responsibility to appropriate standards organizations able and willing to take on the work.

An Institute created by implementation of these several recommendations would have met the criteria being used in this exercise with only the following few exceptions:

Criterion 3 - Inability to deal with treaty as well as nontreaty international standardization activities.

Criterion 6 - No provision for dealing with concerns of state and local governments other than building codes.

I suggest that if the several recommendations made by this panel had been implemented there would have been much less, and possibly, no need for such subsequent actions as: Congressional Bills H.R.7506 (1973), S.3555 (1976), S.825 (1977), the National Standards Policy Advisory Committee, (NSPAC), and the recently proposed Federal Trade Commission Rule for regulation of voluntary standards organizations.

Failure to implement the panel's recommendations was due in part to a change in the administration of the Department of Commerce at the time the panel's report was submitted. There also was some reluctance on the part of ANSI to push for direct financial support from the government, evidently for fear that in accepting such support there would be a determined concomitant influence exerted by the government to become directly involved in the management of the Institute. This fear has been and continues to be demonstrated by the head of the ANSI staff.

The government, on its part, has shown no initiative to provide the financial support recommended by the panel. It seems evident that both positions in this matter must change if the most productive relations between the government and a national standards institution are to be established.

Failure of ANSI to secure a Federal Charter was due, at the time, to a position taken by the then Head of the Judiciary Committee of the House. This was, I have been informed, not to issue any more Federal Charters to any organization for any purpose: Since that particular Head of the Judiciary Committee has been replaced the situation may have changed. However, ANSI has not been sure it wanted or needed a Federal Charter and has acted accordingly.

Other details in the panel report related to the present discussion may be found in National Technical Information Service Panel Report publications PB 166 811 A & B, Springfield, Virginia 22151.

Bill H.R. 7506-93d Congress (1973)

One of my principal tasks as Director of the Commerce Office of Product Standards in 1974 was to try to get action on this Bill. It had previously been drafted by Mr. Richard O. Simpson, when he held the position I had then, and Dr. Forman has now.

Introduction of this legislation was primarily in response to a Tri-Partite Agreement among the United Kingdom, Germany and France to accept results of tests of electronic components undertaken in any of these countries. This would give these three countries a trading advantage over the United States on imports of such components. Incidentally, this Tri-Partite Agreement also stimulated the recently completed Tokyo Round of GATT negotiations concerned with elimination of standards and certification as barriers to international trade.

The preamble in the Bill defined its purpose to be "To foster fuller United States participation in international trade by the promotion and support of representation of United States interests in international voluntary standards activities and for other purposes."

Section 2 of the Bill stated that: "The Congress finds that the effectiveness of United States participation in the development and adoption of voluntary standards is increased by cooperation between government and industry in standards matters, and that such cooperation can be improved by providing within the government a focus for international voluntary standards activities."

Section 4 identified the Secretary of Commerce as being the focal point called for in Section 2.

Elsewhere in the Bill there were several references to testing and certification in recognition of their importance alongside standards.

Although this Bill never was acted upon by the Congress it did lay the ground work for the present Commerce National Voluntary Laboratory Accreditation Program (NVLAP).

The Bill authorized Commerce to finance appropriate standardization and certification activities by organizations in the private sector.

The Bill defined an "international voluntary standard" as "a voluntary standard developed for use within the territory of two or more countries." There was no specific reference to ISO or IEC, nor to representation of the U.S.A. in these organizations.

The limited objectives of this Bill do not bring into play several of the criteria being used here to appraise the several options being discussed in this conference. However, details of the Bill warrant review in any study of the various options which I hope will follow this conference.

As noted previously, the Bill never got out of the House Commerce Subcommittee to which it had been referred. This was due in part to opposition stimulated by so-called consumer protection groups under the influence of Ralph Nader. Even more damaging was similar opposition from the Head of the Judiciary Committee of the House by way of alleged anti-trust aspects of standardization activities in the private sector. What was probably the final killing blow was the very much restrained support of the Bill by spokesmen for ANSI as representative of organizations in the private sector which the Bill could have benefited.

This lack of enthusiastic support by ANSI was surprising in view of the fact that the present Executive Vice-President had some years previously prepared and circulated a "draft legislative proposal" for the future guidance of Mr. Simpson in action leading to H.R.7506. This draft proposal stated that "international programs and funding would be planned, financed and implemented on a partnership basis between government and the private sector." Lost also was an important step towards increased "cooperation between government and industry in standards matters."

Following the demise of this Bill a review of its provisions, in relation to the existing statutory authority of the Secretary of Commerce, established that the principal objectives of the Bill could be affected by the Secretary without further legislation. It was decided that desirable confirmation of the asserted authority of the Secretary could be provided by way of an Executive Order. Such an Order was drafted and approved by the Secretary but no further action was taken. The indicated authority of the Secretary still exists as another viable option.

A Standards Council of the U.S.A.

While in the Commerce Office of Product Standards in 1974 I concluded that it would be useful to organize a study designed to update the 1965 report of the Commerce Technical Advisory Board Panel on Engineering and Commodity Standards. In the course of planning such a study I became a consultant to Ambassador Dent who was then head of the Office of Special Trade Negotiations and in charge of U.S.A. participation in negotiations which have since led to the GATT standards code. Implementation of U.S. commitments as a signatory of this code is covered by the Trade Agreements Act of 1979. We decided that the proposed study should be concerned particularly with "how the proposed GATT standards code should be implemented in the United States and how it should be utilized to promote U.S. trade and commerce and other U.S. public interests." This sentence is quoted from the draft of a Federal Register notice of a proposed establishment of an advisory committee.

Ambassador Dent was at first inclined to deal with his needs re standardization thru legislation to be substituted for the Bill H.R.7506 that had gotten nowhere in the U.S. Congress. I persuaded him to abandon this approach and to await guidance from the proposed Advisory Committee.

Organization of the committee had extended to recruiting the proposed 15 to 20 members to represent industry, consumers, small business, labor and standards organizations. An individual on the staff of the Department of Commerce was assigned to be Secretary of the Committee, which I was to chair.

In the middle of these organizational activities early in 1976, the plans for the study were called off. I have reason to believe that this was the result of intervention by ANSI thru its Managing Director (now Executive Vice President). ANSI persuaded the Office of Special Trade Negotiations and the Commerce Department to abandon the proposed study in favor of a contract with ANSI to undertake a study having a similar objective, but with a narrower scope than the more general updating of the 1965 CTAB report as originally planned.

ANSI's successful effort to scuttle what I had been organizing was surprising in view of the fact that I had asked ANSI for comments on what I had in mind, and had been encouraged to go ahead by its then Managing Director (currently its Executive Vice President). The only reservation was as to timing in favor of 1976 rather than late 1975.

I am including these personal historical notes to support my expectation that since the same officer continues "to call the shots" for ANSI, anyone concerned with any alternative to the present ANSI proposal should expect ANSI to resist any approach involving participation by the government, especially if the proposal is not originated by ANSI.

This is particularly pertinent to the concept of a Standards Council of the U.S.A. along the lines of the Standards Council of Canada, (SCC), established by the Parliament of Canada as the Standards Council of Canada Act C-163-1970. A copy of this Act is attached to my paper as Appendix 1.

Attention to this possibility was mentioned in a list of topics to be addressed in the study that ANSI chose to kill, possibly because they didn't want such an approach to become a subject of serious attention at the time. This is probably still the case. The latter conclusion is based on the fact that, at a meeting called to plan this conference, the spokesman for ANSI endeavored to persuade those present that, since ANSI was planning to deal with the matter by possibly restructuring its International Standards Council as described here by Dr. Podolsky, there was no need for this conference, or for the consideration of any alternatives to the current proposal which ANSI has under consideration. Nevertheless, the majority at the planning meeting agreed that this conference should be held and that alternatives to the tentative ANSI scheme should be presented for possible future consideration.

Plans for the aborted 1976 study included a list of questions related to the establishment of a Standards Council of the U.S.A. identified as Option A. This list appears in Appendix 2 to this paper.

Option B in the list called for ANSI to be given a Federal Charter with a higher level of government participation. Questions related to this option are also listed in the Appendix 2.

The several questions related to these options should receive appropriate attention in any further study of the several alternatives that may be undertaken as a desirable follow-up to this conference.

As a basis for further consideration I had drafted my concept of the nature, policy and functions of a Standards Council of the U.S.A. (SCUSA). This was patterned after the Standards Council of Canada (SCC). Details of what I visualized at the time are in Appendix 3.

Subsequent events have overtaken several of the items in this list (Appendix 2) which are, therefore, no longer pertinent. This is the case, for example, with item 2 re accreditation of testing laboratories, item 9, which anticipated the GATT code, and item 10 now covered by the OMB Circular A-119, and item 13, now in the hands of the Metric Board. However a standards council could be of considerable help to the Metric Board in connection with the use of metric deminsions in existing and new standards.

From an examination of what was visualized in relation to the several criteria suggested earlier for appraising optional approaches for dealing with international standardization requirements of the U.S., it would appear that a Standards Council of the U.S.A. satisfies all of these criteria with the possible exception of the following:

Re criteria item 3, no reference was made to representation of U.S.A. interests in treaty as well as non-treaty international standardization activities. I met recently with the Executive Director of the Standards Council of Canada. The object of the meeting was to explore details of how it had been operating that would be pertinent to similar operation of a Standards Council of the U.S.A.

I inquired about the Canadian Council's activities related to treaties. I was informed that the SCC Act is silent on this point. However, SCC is given an opportunity to advise the Department of Industry Trade and Commerce on matters involving standards, certification and testing as related for example, to the GATT code and to Canada's participation in the United Nations Economic Commission for Europe.

Re criteria item 6, concerns of state and local regulatory bodies were not dealt with. Presumably this could be handled in the composition of the governing board of the Council. Members of the Standards Council of Canada Corporation include (a) six members who are employed in the public service of Canada; (b) ten members, one member to be nominated by the lieutenant governor in council of each of the 10 provinces; and (c) not more than forty-one other members to be appointed by the Governor in Council.

It would be impractical for the Board of a United States Council to include a member from each of fifty states. But some other means could be found for representation of state and local interests.

It may be noted that the division between private sector and governmental representation in the Canadian Council is in the ratio of about 3 to 1. This removes possibility of domination by the government. A similar distribution on the Board of a Standards Council of U.S.A. would deal with similar fear of government domination as an inevitable consequence of, or counterpart to, government financing.

There is no limitation on the term of members employed in the public service.

Terms of the other members are ordinarily three years. Retirements are scheduled so that, as far as possible, fewer than half the members will retire in any one year.

My discussions with the Executive Director of SCC covered the following other details:

SCC does not, as a matter of form, recognize as National Standards of Canada those issued by Canadian government agencies.

SCC has been involved in GATT and the Economic Commission for Europe. In implementation of the GATT code it will serve as the inquiry point re government as well as private sector standards.

In connection with standards used for procurement by government agencies, the National Standards System of Canada administered by SCC includes as an accredited standards writing organization "The Canadian General Standards Board." This is a new title for the former Canadian Government Specifications Board. It is concerned with procurement by government agencies. CGSB has become an amalgam of government and private sector personnel. Their standards, as used for procurement, and voluntary consensus standards are submitted to CSC for recognition as "National Standards of Canada" for use in the private sector and for reference in Provincial codes.

In the field of regulation, a number of private sector standards are referenced in Federal Legislation. Currently such referencing does not require that referenced standards have been recognized by SCC as National Standards of Canada. Action by the government to recognize such qualification as a matter of principle, if not as a specific requirement, would have the same effect.

Apparently, the SCC has not encountered any serious problems in carrying out its mission. In the early stages there was some strain in working out proper working relationships with the totally private sector Canadian Standards Association (CSA). The latter was something less than enthusiastic about the establishment of the SCC. Incidentally, a similar attitude can be anticipated on the part of ANSI with respect to a possible creation of a Standards Council of the U.S.A.

By action of its Board, the CSA is committed to submission of its standards to SCC for recognition as National Standards of Canada. There is no legal requirement for such submission.

Some problems arose in the accreditation of certifying organizations. One of these was whether accreditation should be limited to "not for profit" organizations and whether any accredited organization should be involved in standards development. It was decided not to limit accreditation to "not for profit organizations" and to encourage all accredited certification organizations to become involved in standards development.

There have been no problems in accrediting testing laboratories. This is done by disciplines rather than by products. Use is made of professional advisors as inspectors for accreditation in accordance with criteria established by a CSA certification advisory committee.

In connection with international standardization the SCC has Canadian National Committees for ISO and IEC. These are appointed by the SCC to direct and supervise Canadian participation. For each ISO technical committee there is an advisory committee properly representative of the national interest. Included are representatives of industrial, government, academic and consumer interests. The SCC provides financial support for the advisory committees and secretarial support, e.g. as a focal point for documentation and responses to the ISO committees. In addition, it provides facilities for preliminary meetings to define positions to be taken. The SCC also covers return economy fares of delegates when requested. There is no per diem allowance. A responsibility of an advisory committee is to insure technical competence of delegates to working groups.

No problem arose re acceptance of SCC as a member by ISO and IEC as a replacement for the Canadian Standards Association, which had held the memberships. This suggests that ISO and IEC would accept SCUSA as a substitute for ANSI if a SCUSA should be created. CSC will host the 1982 meeting of the ISO General Assembly and Council.

The Standards Council of Canada had an income of \$4,205,859 in the year ended March 31, 1980. Of this, \$3,700,000 (88%) came from the Canadian Ministry of Industry Trade and Commerce. There are 35 persons on its Senior Staff.

As an extension of my discussions with the Executive Director of the SCC I solicited comments from outside SCC to discover if there were any problems with its operations that had not been brought to my attention.

From this exploration I reached the conclusion that things were going very well and even better than might have been expected from the doubts that were expressed when the SCC was being created by the Government of Canada.

It was stated, in particular relation to the topic of the present conference, that the SCC as the member for Canada in ISO and IEC had been able to achieve a higher focus. This was primarily the result of a greater input made possible by greater funding and much more staff support than had been available to the previous representative from the private sector. The latter also benefited greatly by way of relief from the cost of dues for membership in both ISO and IEC.

There was a complaint as to what was considered to be excessive requirements for documentation.

There was also a fear that a possible loss of identity by standards organizations in the private sector could make it more difficult for them to raise funds which they needed to operate satisfactorily.

Without suggesting that there was a trend towards SCC becoming the only standards organization in Canada the hope was expressed that the SCC would continue to serve primarily as a coordinating agency.

There was a complaint that the SCC had been too rigid with reference to the format prescribed for submission of standards for recognition as National Standards of Canada. There should be sufficient latitude to enable organizations to use formats designed to suit particular needs of users of the standards, and to preserve the identity of the source of a standard.

It was suggested that, if a Standards Council of the U.S.A. were to be established, it should run itself rather than be run by the government, and with no political influence, e.g. on the membership of the Council. The source of the head of the operating staff should change from time to time between the private sector and the government.

Finally, the success of this arrangement in Canada was attributed primarily to compatibility among the people involved within the SCC and the standards writing bodies in their cooperative efforts in the national interest.

In the event that creation of a Standards Council of the U.S.A. should take a legislative route, I reviewed high points of the debate in the Canadian Parliament on the Act that created the SCC. The high points include:

In opposition to a proposal that the Council should recommend which standards should be made compulsory, it was stated that the Council was designed to deal primarily with standards for voluntary use.

The Act provided for the Council to recommend to government agencies that certain standards could be made compulsory by them, not by the Council.

There was a proposal that the Council include a specified number, (10), of representatives from "bona fide consumer organizations." This was defeated on the basis that specifying categories and the numbers in each to be represented would present organizational problems and lead to advocacy of many other specific categories of representation.

An assertion was made on behalf of the Canadian Chamber of Commerce "that a Standards Council of Canada would duplicate the work of the Canadian Standards Association and cause confusion." It was claimed, also, that "the Standards Council of Canada would become an expensive, expanding bureaucracy that was not needed."

Another objector viewed the Standards Council as being "another instrument of government control over industry which would increase overhead costs."

In a discussion of financing, the possibility of the Council financing part of its own expenses by membership fees and industry contributions was considered. This was abandoned to avoid competition for funds with organizations in the private sector. In this context the Minister stated that the Council "will not invade the revenue sources of the CSA or those of other organizations."

In defense of creation of the Council a member referred to "a need for improved relations with international standards organizations."

The Minister sponsoring the establishment of the Council defined the essential characteristics of a national standards association as follows:

"1. It should be representative of all the parties interested directly or indirectly in the adoption of standards.

"2. It should not only be impartial but also appear to be so.

"3. It should command the respect of all, it should be dynamic and it should be aware of national, domestic and international policies."

He asserted that "the Canadian Standards Association with all its other merits did not meet these criteria." The Minister stated further that "the establishment of the Council will extend the principle of consultation and participation to the level of policy formulation at the full national level so that interested parties may have a chance to be heard not only in standards writing but in planning the whole direction of standardization activities in the future."

It would "ensure that competing interests are reconciled and that a balanced position reflecting all these interests can be taken by representatives in international organizations. They will speak with one voice. "The Council will be independent of the government in its policies."

The Minister stated also that "from the point of view of prestige and continuity, I believe that it is absolutely necessary for Canada to be represented by an agency created by the Parliament of Canada."

A member noted that "it would be ridiculous to suggest that the government has no role in this field."

In going over the bill, clause by clause, a statement was made that "we do not have a truly national posture in standards to cope with the fact that European countries are using standards as an instrument of industrial and economic policy."

With regard to objections raised by the CSA the Minister stated "the SCC will be made up of people intelligent enough not to abuse. So how can we deprive people of a power that is already used in the standards writing organizations? How can we deprive them of the capacity to look into these matters? CSA and the others will be there on the Council. They will be prominent members of the Council. If they cannot defend the interests of intelligence, wisdom and what-not in this Council, then they should be replaced by the very organization that has appointed them."

An especially cogent philodophical statement by the Minister was: "The government in any broad field such as standardization which reaches far into the lives of many people, has a responsibility not to control the field but to insure that the public interest is protected."

For the purposes of action that may be taken to make use of contributions to this conference, I suggest that with respect to considering pertinent excerpts from the debate in the Canadian Parliament, ANSI's name could be substituted in the references to the CSA.

I have in my files a number of other excerpts from the Canadian Parliament Debate. They can be made available to anyone interested in using appropriate features of the SCC and the steps taken in its creation, as a model in devising something equivalent to it for the U.S.A.

Another guide as to how a Standards Council of the U.S.A. might be created by legislation is provided by the National Institute of Building Sciences (NIBS). This was accomplished by the Housing and Community Development Act of 1974, (PL 93-383,42 (U.S.C. 5301) August 22, 1974). See Appendix 4.

Senate Bills S.3555 and S.825

These bills which did not become legislation were designed to correct perceived defects in the system for development of standards in the U.S.A. The evidence presented in support of the need for the drastic action called for by the proposed legislation fell far short of establishing any such need. The less than 30 cases presented as allegedly horrible examples of the workings of the voluntary standards system did not withstand objective scrutiny. They were a trivial fraction of the thousands of standards developed over the years by standards organizations in the private sector and which have served the national interest so well.

The thrust of these bills was to impose government regulation in contrast to fostering improved cooperation between the government and the standards organizations in the private sector.

These bills were defective with respect to their approach rather than with regard to their laudable objectives. These approaches fell so far short of what may be needed that they don't warrant detailed comments in terms of the criteria being used in the present exercise. Nevertheless, the bills are worth reviewing in any follow-up to this conference designed to achieve the same objectives.

ANSI Report on Implementation of Provisions of the Proposed GATT Standards Code

This report was prepared by ANSI and published in May 1977 under contract No. 6-35789 from the Department of Commerce.

As noted in another section of this contribution to the conference, the ANSI study was substituted for the more comprehensive one that I had tried to organize as an updating of the 1965 report of the Commerce Technical Advisory Board Panel on Engineering and Commodity Standards. This updating was to give particular attention to implementation of the pending GATT code.

In spite of what ANSI had done to kill the study I had been organizing I agreed to serve as a consultant to ANSI in preparing the report called for by their contract.

Recommendations of the report included:

1. A national voluntary coordination body, such as ANSI, be recognized as the focal point for private sector implementation of provisions of the code that affect the private sector, as well as for coordination with the U.S. government for implementing the Code.

2. The Department of Commerce be the government focal point.

These principal recommendations are reflected by similar provisions of the 1979 Trade Agreements Act.

There was considerable delay in getting ANSI and the Department of Commerce together on just how the ANSI report should be implemented. The first effort was initiated by Dr. Forman on December 16, 1977, by way of a meeting called for this purpose. This followed four months of negotiation with the Executive Vice President of ANSI who arranged for repeated postponements of previously scheduled meetings in which he had refused to participate. When a decision was made to hold a meeting with or without representation by ANSI, two representatives of ANSI attended and stayed for only part of the meeting. Principal conclusions reached at this meeting were "that there were (a) matters in the international standards area that sorely needed to be studied carefully and dealt with, and (b) that the role of the Federal government in such matters needed to be determined and clearly defined."

The present conference is based on the persistence of these needs for which the optimum response remains to be chosen. This choice could very well become the principal fruits of this conference.

These historical notes involving the position taken by ANSI are included in this contribution to the conference as a further indication of the climate in which any future study may be undertaken and in which ANSI is certainly, and properly, to be involved.

The report of the December 1977 meeting contains many other details worthy of attention in the future study that has been advocated here.

National Standards Policy
Advisory Committee (NSPAC)

This was an ad hoc committee headed by Mr. Richard Simpson, the Moderator of the present conference. Its primary mission was to produce a clear and positive statement of national policy on standards. This was felt to be needed to counter or "defuse" the increasingly hostile attitude that had emerged in the Congress and in some government agencies. The committee was made up of 30 representatives drawn from government, organized labor, public interest groups, trade associations, industry, professional societies, standards writing bodies, testing laboratories and consumers. It issued a report in December 1978, representing the results of intensive study for about two years.

Unfortunately, with respect to the present conference, but for probably good reasons, it decided not to deal with international standards, although it did recommend that a similar effort be mounted to develop an international standards policy. Nevertheless, its report must be taken into account in any follow-up to this conference.

In the meantime both ANSI and ASTM have become engaged in determining what action they should take to foster a U.S. policy for standardization.

The ANSI approach is to implement the recommendations in the NSPAC report through a task force headed by Mr. Roy Trowbridge, which has not yet submitted a final report.

The Executive Committee of the ASTM Board of Directors has issued a report dated August 15th, 1980, defining "The Position of ASTM on Implementing the National Policy on Standards."

This ASTM document and the forthcoming ANSI task force report must certainly be taken into account, along with the several inputs to this conference, in a study that I hope will serve as a follow-up to the conference.

The need for such a follow-up study has been emphasized in my reviews of the several approaches that have emerged during the past twenty years. In answer to the question as to who should organize and undertake the follow-up I am suggesting that this be undertaken in the private sector with appropriate participation by representatives of Federal and local government agencies.

I hope that Mr. Richard Simpson can be persuaded to serve as chairman of this new study. Candidates for the committee could be drawn from the membership of the previous committee and from contributors to the present conference. The latter should include persons who have submitted supplementary papers not being presented here because of lack of time.

An American International Standards Institute (AISI)

A couple of years ago Dr. Podolsky conceptualized in considerable depth and detail a proposal which Dr. Forman had privately suggested to him in rough outline. The proposal called for the establishment by Federal statute of a quasi-public corporation whose purpose would be annually to obtain funds from the Congress and monetary contributions from the private sector, and with the aid of those funds and contributions to develop and administer a policy for U.S. participation in international standardization activities. According to the proposal, the legislation would authorize the establishment of a corporation in the District of Columbia which would not be a government corporation, and its staff, which would be very minimal in size, would not be government employees. The corporation, which would have Federal Government and private sector personnel on its board of directors, would hire the present ANSI corporation, by contract, to perform tasks assigned to it by the quasi-public corporation. The quasi-public corporation would be funded so that the government's share would be less than 50% of the costs of operating international standardization programs, the remainder to be funded by the private sector, with the object of avoiding dominance of the corporation's activities by the Federal Government.

Dr. Podolsky gave the quasi-public corporation the name, "American International Standards Institute," and developed a proposed charter for the corporation. As a member of a five-man committee of ANSI's Board of Directors assigned to develop solutions to ANSI's financial difficulties, he tried to "sell" the concept to ANSI's Executive Committee over a period of 18 months. He failed to get the Executive Committee to "buy" the concept because some of its members feared that the effect would be for the Federal Government to "take over" the control and operation of ANSI.

When Dr. Podolsky disclosed his detailed plan for implementing AISI to me I saw a good deal of merit in this approach, principally because it would provide for direct government participation and financing in the international field without raising fears of too much government intrusion into national standardization matters.

The small membership of the AISI would consist of 20 persons nominated by the ANSI International Standards Council and 20 persons chosen by the Secretary of Commerce from appropriate government sources.

The President would be elected by the members. An Executive Vice-President would be the Chief Executive Officer of ANSI.

The Secretary would come from the ANSI staff.

In terms of the criteria being used in this comparison of available options the charter of the proposed AISI would have met specifically all of the criteria except:

Criterion 3 - participation in international standardization activities involving treaties.

Criterion 6 - matters involving state and local government interests.

Criterion 7 - possible invasion of ANSI income from the sale of international standards.

As I indicated, there was considerable difficulty in getting the ANSI Board to consider the proposed AISI. After the individual members of the Board were urged by mail a number of times by one of the proposal's proponents to support the proposal, the Board in September 1979 decided to refer the matter to the ANSI International Standards Council for appropriate attention or submission of some alternative.

The International Standards Council set up a working group under the chairmanship of Dr. Podolsky, and called upon the group to evaluate the AISI and any other proposals for improving ANSI's international standardization activities. The working group came up with a proposal for restructuring the International Standards Council, as described by Dr. Podolsky on this occasion, as its preferred solution to the problem which it studied. It was indicated that the AISI proposal was not considered on its merits by the working group for reasons of practical expediency (namely, the likelihood that it would not be a recommendation which ANSI's Board of Directors would approve). I understand that, so far, the proposal for restructuring the International Standards Council is having difficulty getting approval by ANSI. This is unfortunate, for it has considerable merit and must be given appropriate attention in any further study that may be generated by this conference. Possibly, as a result of comments made at this conference, ANSI's International Standards Council and its Board of Directors may become more favorably inclined to adopt the working group's proposal in its present or some modified form. I will discuss the recommendations of Dr. Podolsky's working group later, in the same frame of reference I have been using for all the options I have been describing.

OMB Circular A-119

On January 17, 1980 the Office of Management and Budget (OMB) issued Circular A-119 captioned "Federal Participation in the Development and Use of Voluntary Standards." The Circular establishes policy to guide executive branch agencies in their involvement in the development of standards by organizations in the private sector and their preferential use of such standards in specifications for procurement. Similar use by reference in regulations is not provided for.

The provisions of section 6 C of the Circular are designed to identify standards organizations in the private sector for listing as being qualified for Federal participation. Such requirements for listing are not to be applied to "multinational organizations which develop and issue voluntary international standards."

This Circular does not constitute an option requiring comparison with other approaches in the present exercise.

Item 1 in the criteria being applied to the several options which I am discussing in this paper calls for any organization dealing with international standards to be concerned with national standards as well, consequently the provisions of this Circular must be taken into account in a future study that would make use of the inputs to this conference.

The Department of Commerce is currently engaged in setting up ground rules to be used by Executive agencies in implementation of the Circular. These ground rules, when issued, must also be taken into account in the proposed future study.

The Trade Agreements Act of 1979

Section 413 of the Trade Agreements Act of 1979 deals with the representation of U.S.A. interests by private persons and by Federal agencies. Sub-section (b) (1) (B) states that "representation of United States interests before any private international standards organization shall be carried out by the organization member." The "organization member" is defined as meaning "the private person who holds membership in a private international standards organization." Currently, ANSI as a member of ISO is given the indicated responsibility. However, this would not prevent any other organization that might replace ANSI as the U.S.A. member of ISO from acting as required by the Act.

The Act does not provide for financial support of private person representation in ISO or IEC other than thru the Secretary of Commerce by way of grants or contracts (Section 415 (A) (3)).

Proposed Federal Trade Commission Rule

The recently proposed Federal Trade Commission (FTC) rule for regulation of standards organizations in the private sector can be described as an effort to achieve by rule making what the Congress was unwilling to impose by legislation. It appears that, at present at least, the Congress remains unwilling to endorse such an alternative.

In presenting a statement in opposition to the rule at a public hearing in 1979 I noted that the FTC rule was in conflict with other actions within the government. These included a stated policy of the administration to avoid rather than impose more government regulation of activities in the private sector. Included also were actions being taken to implement the GATT agreement, and provisions of the prospective OMB Circular A-119. I suggested in my statement that a preferred course of action would be to organize a study that would define how best to combine any desirable features of the FTC rule with provisions from the other sources in the form of an optimum arrangement involving the government and standards organizations in the private sector.

I suggest, now, that the objectives of the study proposed in my statement on the FTC rule can be achieved advantageously by a follow-up to the present conference.

A Restructured ANSI International Standards Council

Dr. Podolsky has presented the details and present status of the proposal from his ANSI task force for restructuring its International Standards Council to give it policy making and operating authority in place of its present merely advisory capacity. This would be responsive to current needs for a closer working relationship with the Federal Government and for implementation of Title IV of the Trade Act of 1979, the GATT Code and the OMB Circular A-119.

Examination of the proposal for a restructured ANSI International Standards Council in relation to the criteria being used in the present exercise shows that it meets these criteria with the following exceptions:

Criterion 6 - dealing with concerns of state and local governments.

Criterion 7 - related to direct involvement in the development of standards.

Criterion 9 - yet to be confirmed support by standards organizations who have recently raised questions of confidence in ANSI.

Criterion 10 - the proposed restructured international standards council as a sub-division of ANSI falls short of what is needed with respect to ready identification, especially outside U.S.A., of a government presence such as would be provided by a quasi-governmental organization.

Nevertheless, many features of what has been proposed by Dr. Podolsky and his task force have a great deal of merit. These must be taken into account in the further action that should stem from the several inputs to this conference.



CHAPTER 41 (1st Supp.)

CHAPITRE 41 (1^{re} Supp.)

An Act to provide for the establishment
of a Standards Council of Canada

Loi prévoyant la création du Conseil
canadien des normes

[1969-70, c. 73]

[1969-70, c. 73]

SHORT TITLE

TITRE ABRÉGÉ

Short title

1. This Act may be cited as the *Standards Council of Canada Act*.

1. La présente loi peut être citée sous Titre abrégé le titre: *Loi sur le Conseil canadien des normes*.

INTERPRETATION

INTERPRÉTATION

Definitions

2. In this Act

Définitions

"Council"

"Council" means the Standards Council of Canada established by section 3;

2. Dans la présente loi

«Conseil» désigne le Conseil canadien des normes constitué par l'article 3;

"Minister"

"Minister" means such member of the Queen's Privy Council for Canada as is designated by the Governor in Council to act as the Minister for the purposes of this Act.

«Ministre» désigne celui des membres du Conseil privé de la Reine au Canada qui est désigné par le gouverneur en conseil pour agir à titre de Ministre aux fins de la présente loi.

COUNCIL ESTABLISHED

CRÉATION DU CONSEIL

Council established

3. A corporation is hereby established to be known as the Standards Council of Canada consisting of

3. Est constituée par les présentes une corporation appelée Conseil canadien des normes, comprenant

- (a) six members who are employed in the public service of Canada,
- (b) ten members, one member to be nominated by the lieutenant governor in council of each of the ten provinces, and
- (c) not more than forty-one other members,

- a) six membres employés dans la fonction publique du Canada,
- b) dix membres, le lieutenant-gouverneur en conseil de chacune des dix provinces en nommant un, et
- c) au plus quarante et un autres membres,

to be appointed by the Governor in Council as provided in section 6.

qui sont nommés par le gouverneur en conseil, comme le prévoit l'article 6.

OBJECTS AND POWERS

OBJETS ET POUVOIRS

Objects

4. (1) The objects of the Council are to foster and promote voluntary standardization in fields relating to the construction, manufacture, production, quality, performance and safety of buildings, structures, manufactured articles and products and other goods, including components thereof, not expressly provided for by law, as a means of advancing the national economy, benefiting the health, safety and welfare of the public, assisting and protecting consumers, facilitating domestic and international trade and furthering international cooperation in the field of standards.

4. (1) Le Conseil a pour objet d'encourager et de favoriser la normalisation volontaire dans les domaines relatifs à la construction, à la fabrication, à la production, à la qualité, au rendement, à la tenue, à l'usage et à la sécurité de bâtiments, de structures, d'articles et produits manufacturés et autres marchandises, y compris leurs parties composantes, lorsqu'elle n'est pas expressément prévue par la loi, en vue de développer l'économie nationale, d'améliorer la santé, la sécurité et le bien-être du public, d'aider et de protéger les consommateurs, de faciliter le commerce intérieur et extérieur et de promouvoir la coopération internationale dans le domaine des normes.

Powers

(2) The Council, in carrying out its objects in the fields referred to in subsection (1), may

(2) Le Conseil, pour la réalisation de ses objets dans les domaines mentionnés au paragraphe (1), peut

(a) promote cooperation among organizations concerned with voluntary standardization in Canada in those fields to coordinate standardization activities and develop common standards and codes;

a) encourager la coopération entre les organismes s'intéressant à la normalisation volontaire au Canada dans ces domaines, en vue de coordonner les activités de normalisation et d'élaborer des normes et codes communs;

(b) promote cooperation between organizations concerned with voluntary standardization in Canada in those fields and departments and agencies of government at all levels in Canada with a view to achieving compatibility and maximum common usage of standards and codes in those fields;

b) encourager la coopération entre les organismes s'intéressant à la normalisation volontaire au Canada dans ces domaines et les ministères, départements et organismes du gouvernement à tous les niveaux au Canada en vue d'arriver à la compatibilité des normes et codes dans ces domaines et à leur usage commun maximum;

(c) recommend criteria and procedures relating to the preparation, approval, acceptance and designation of voluntary standards in Canada in those fields;

c) recommander des critères et des procédures pour la préparation, l'approbation, l'acceptation et la désignation de normes volontaires au Canada dans ces domaines;

(d) accredit, in accordance with criteria and procedures adopted by the Council, organizations in Canada engaged in standards formulation, testing and certification in those fields, and maintain a register of such organizations and of their standards marks;

d) accréditer, conformément aux critères et aux procédures adoptés par le Conseil, les organismes s'occupant au Canada de la formulation, de la mise à l'épreuve et de l'authentification des normes dans ces domaines, et tenir un registre de ces

(e) approve standards in those fields submitted by organizations accredited by the Council as national standards where appropriate, and maintain an index of approved standards;

(f) provide for the identification and evaluation of the need for new standards, revisions to existing standards and additional testing and certification services in those fields, and arrange for that need to be satisfied

(i) by obtaining the cooperation of organizations accredited by the Council to engage in standards formulation, testing and certification, and

(ii) where that need cannot be satisfied in the manner described in subparagraph (i), by promoting the establishment or utilization of new or other organizations for that purpose;

(g) establish and register under the *Trade Marks Act* its own standards marks in those fields and, subject to that Act and in accordance with any agreement or arrangement between the Council and any organization accredited by it respecting the use of such marks in relation to standards formulated by that organization, authorize and regulate their use;

(h) unless otherwise provided for by any other Act of the Parliament of Canada or by treaty

(i) represent Canada as the Canadian member of the International Organization for Standardization, the International Electro-technical Commission and any other similar international organization engaged in the formulation of voluntary standards, and

(ii) ensure effective Canadian participation in the activities of such organizations;

(i) promote, in cooperation with Canadian organizations engaged in voluntary standards formulation, testing and certification in those fields, arrangements with organizations similarly engaged in other countries for the exchange of information and for cooperation in such activities;

organismes et de leurs marques de conformité aux normes;

e) approuver, s'il y a lieu, comme normes nationales, les normes dans ces domaines soumises par des organismes accrédités par le Conseil et tenir un index des normes approuvées;

f) s'assurer qu'est reconnu et évalué le besoin d'établir de nouvelles normes, de réviser les normes existantes, de créer de nouveaux services de mise à l'épreuve et d'authentification dans ces domaines, et prendre les dispositions pour satisfaire à ce besoin

(i) en obtenant la coopération des organismes accrédités par le Conseil pour s'occuper de la formulation, de la mise à l'épreuve et de l'authentification des normes, et

(ii) lorsqu'il n'est pas possible de satisfaire à ce besoin de la façon indiquée au sous-alinéa (i), en encourageant la création ou l'utilisation d'organismes nouveaux ou autres à cet effet;

g) établir et enregistrer, en vertu de la *Loi sur les marques de commerce*, ses propres marques de conformité aux normes dans ces domaines et, sous réserve de cette loi et conformément à tout accord ou arrangement conclu entre le Conseil et tout organisme accrédité par lui, concernant l'utilisation de ces marques relativement aux normes formulées par cet organisme, en autoriser et réglementer l'usage;

h) sauf disposition contraire d'une autre loi du Parlement du Canada ou d'un traité

(i) être le représentant du Canada auprès de l'Organisation internationale de normalisation, de la Commission électrotechnique internationale et de toute autre organisation semblable s'occupant de la formulation des normes volontaires, et

(ii) assurer la participation effective du Canada aux activités de ces organisations;

i) encourager, de concert avec les organismes canadiens s'occupant de la formulation, de la mise à l'épreuve et de

(j) provide financial assistance to Canadian organizations concerned with voluntary standardization in those fields to assist them in meeting national and international requirements;

(k) collect, translate and distribute information on standards and standardization activities in those fields in and outside Canada;

(l) promote the use of standards approved by the Council;

(m) review the need for and make recommendations with respect to the use of, or conversion to, the international system of units, known as the metric system, in Canadian industry, trade and commerce; and

(n) make recommendations to the Minister, such recommendations to be included in the annual report of the Council, in respect of standards which, in the opinion of the Council, should be made compulsory.

(3) In carrying out its objects and exercising its powers under this section, the Council shall, to the greatest extent practicable, make use of the services and facilities of existing organizations in Canada engaged in standards formulation, testing and certification in the fields referred to in subsection (1).

5. The Council, in carrying out its objects and exercising its powers under section 4, may

(a) expend, for the purposes of this Act, any money appropriated by Parliament for the work of the Council or received by the Council through the conduct of its operations;

(b) acquire and hold real property or any interest therein and alienate that property or interest at pleasure;

(c) acquire any money, securities or other property by gift, bequest or other-

l'authentification de normes volontaires dans ces domaines, des accords avec des organismes d'autres pays ayant des activités analogues, en vue de l'échange de renseignements et de la coopération à ces activités;

j) fournir une aide financière à des organismes canadiens s'intéressant à la normalisation volontaire dans ces domaines pour les aider à faire face aux exigences nationales et internationales;

k) compiler, traduire et diffuser des renseignements portant sur les normes et les activités de normalisation dans ces domaines au Canada et à l'étranger;

l) encourager l'utilisation des normes approuvées par le Conseil;

m) voir s'il y a lieu d'adopter, dans l'industrie et le commerce canadiens, le système international d'unités, connu sous le nom de système métrique, et faire des recommandations sur l'utilisation de ce système ou sur la conversion à ce système; et

n) faire des recommandations au Ministre, qui doivent être incluses dans le rapport annuel du Conseil, relativement aux normes qui, de l'avis du Conseil, devraient être obligatoires.

(3) Pour la réalisation de ses objets et Idem dans l'exercice des pouvoirs que lui confère le présent article, le Conseil doit, dans toute la mesure du possible, utiliser les services et installations des organismes existant au Canada et s'occupant de la formulation, de la mise à l'épreuve et de l'authentification dans les domaines visés au paragraphe (1).

5. Pour la réalisation de ses objets et Autres pouvoirs dans l'exercice de ses pouvoirs en vertu de l'article 4, le Conseil peut:

a) dépenser, aux fins de la présente loi, tous deniers affectés par le Parlement aux travaux du Conseil ou reçus par le Conseil dans la conduite de ses travaux;

b) acquérir et détenir des biens immobiliers ou un droit y afférent et aliéner ces biens ou ce droit à volonté;

c) acquérir tous deniers, titres ou autres biens par donation, legs ou autrement, et employer ou gérer toute partie de ces

wise, and expend, administer or dispose of any such money, securities or other property, subject to the terms, if any, upon which such money, securities or other property is given, bequeathed or otherwise made available to the Council;

(d) publish and sell or otherwise distribute information on standardization; and

(e) do such other things as are incidental or conducive to the attainment of the objects and the exercise of the powers of the Council.

deniers, titres ou autres biens ou en disposer, sous réserve, le cas échéant, des conditions auxquelles ces deniers, titres ou autres biens sont donnés ou légués au Conseil ou sont autrement mis à sa disposition;

d) publier et vendre ou autrement distribuer des renseignements sur la normalisation; et

e) faire toutes autres choses qui sont accessoires ou favorables à la réalisation des objets et à l'exercice des pouvoirs du Conseil.

ORGANIZATION

ORGANISATION

Tenure of public service members

6. (1) Each member of the Council who is employed in the public service of Canada shall be appointed to hold office during pleasure.

6. (1) Chaque membre du Conseil qui est employé dans la fonction publique du Canada est nommé à titre amovible.

Mandat des membres de la fonction publique

Tenure of other members

(2) Each of the other members of the Council shall be appointed to hold office during pleasure for such term, not exceeding three years, as will ensure as far as possible the expiration in any one year of the terms of appointment of fewer than half the members so appointed.

(2) Chacun des autres membres du Conseil est nommé à titre amovible pour un mandat de trois ans au plus, calculé autant que possible de manière qu'au cours d'une année quelconque les mandats de moins de la moitié seulement des membres ainsi nommés viennent à expiration.

Durée du mandat des autres membres

President and Vice-president of Council

7. (1) The Governor in Council shall appoint one member of the Council to be President of the Council and one member of the Council to be Vice-President of the Council for such term, not exceeding three years, as is fixed by the Governor in Council.

7. (1) Le gouverneur en conseil doit nommer, pour un mandat de trois ans au plus, un membre du Conseil à titre de président du Conseil et un autre à titre de vice-président du Conseil.

Président et vice-président du Conseil

Absence of President

(2) In the event of the absence or incapacity of the President or if the office of President is vacant, the Vice-President has and may exercise and perform all the duties and functions of President.

(2) En cas d'absence ou d'incapacité du président, ou si le poste de président est vacant, le vice-président assume et peut exercer toutes les fonctions du président.

Absence du président

Re-appointment

8. A retiring President, Vice-President or other member of the Council is eligible for re-appointment to the Council in the same or another capacity.

8. Un président, un vice-président ou un autre membre sortant du Conseil peut être nommé de nouveau au Conseil au même titre ou à un autre.

Nouvelle nomination

Remuneration of President

9. (1) The President of the Council shall be paid such remuneration and expenses as are authorized by the Governor in Council.

9. (1) Le président du Conseil reçoit, à titre de rémunération et de remboursement de dépenses, le montant autorisé par le gouverneur en conseil.

Rémunération du président

Travelling and living expenses

(2) The members of the Council, other than the President, shall serve without remuneration but each such member is entitled to be paid reasonable travelling and other expenses while absent from his ordinary place of residence in the course of his duties under this Act.

(2) Les membres du Conseil autres que le président ne perçoivent à ce titre aucune rémunération, mais chacun de ces membres a droit au remboursement des frais raisonnables de déplacement et autres frais encourus pendant qu'il est absent de son lieu ordinaire de résidence dans l'exercice de ses fonctions en vertu de la présente loi.

Remuneration of members for additional duties

(3) Notwithstanding subsection (2), a member of the Council other than the President may, for any period during which he performs with the approval of the Council any duties on behalf of the Council in addition to his ordinary duties as a member thereof, be paid such remuneration therefor as may be authorized by the Governor in Council.

(3) Nonobstant le paragraphe (2), un membre du Conseil autre que le président peut, pour toute période où il remplit, au nom du Conseil et avec l'approbation de ce dernier, des fonctions qui s'ajoutent à ses fonctions ordinaires de membre dudit Conseil, recevoir à cet égard la rémunération que peut autoriser le gouverneur en conseil.

Head office

10. The head office of the Council shall be in the National Capital Region described in the schedule to the *National Capital Act*.

10. Le siège social du Conseil sera situé dans la région de la Capitale nationale délimitée à l'annexe de la *Loi sur la Capitale nationale*.

Meetings

11. The Council shall meet at least once a year in the National Capital Region and may meet at such other times and at such other places as it deems necessary.

11. Le Conseil doit se réunir au moins une fois par an dans la région de la Capitale nationale et peut, en outre, se réunir en d'autres temps et lieux, comme il le juge nécessaire.

Executive committee

12. (1) There shall be an executive committee of the Council consisting of the President, the Vice-President and seven other members of whom six shall be selected by the Council and one shall be designated by the Governor in Council.

12. (1) Est établi un bureau du Conseil, composé du président, du vice-président et de sept autres membres dont six doivent être choisis par le Conseil et un doit être nommé par le gouverneur en conseil.

Chairman of executive committee

(2) The President of the Council shall be the chairman of the executive committee.

(2) Le président du Conseil est président du bureau.

Duties of executive committee

(3) The executive committee of the Council may exercise and perform such of the powers and functions of the Council as the Council may by by-law assign to it and shall submit at each meeting of the Council minutes of its proceedings since the last preceding meeting of the Council.

(3) Le bureau du Conseil peut exercer ceux des pouvoirs et fonctions du Conseil que ce dernier peut lui attribuer par règlement administratif et doit présenter à chaque réunion du Conseil des comptes rendus de ses délibérations depuis la réunion précédente du Conseil.

By-laws

13. (1) The Council may make by-laws for the regulation of its proceedings and generally for the conduct of its activities including the establishment of ad hoc, standing and other committees of the Council.

13. (1) Le Conseil peut établir des règlements administratifs régissant ses délibérations et, en général, pour la conduite de ses activités, y compris la création de comités spéciaux de comités permanents et d'autres comités du Conseil.

Advisory
committee

(2) Any by-law made pursuant to subsection (1) establishing an advisory committee of the Council may provide for the membership thereon of persons other than members of the Council, in addition to members of the Council.

(2) Tout règlement administratif, établi en conformité du paragraphe (1) et créant un comité consultatif du Conseil, peut prévoir que ce comité comprendra, outre des membres du Conseil, d'autres personnes.

STAFF

Appointment
of
executive
director

14. (1) The Governor in Council, on the recommendation of the Council, may appoint an executive director of the Council.

Direction
of work
and staff

(2) The executive director is the chief executive officer of the Council and, subject to subsection (3), has supervision over and direction of the work and staff of the Council.

Appointment
of
staff;
duties, etc.

(3) The Council may

- (a) appoint such other officers and employees as are necessary for the proper conduct of the work of the Council; and
- (b) prescribe the duties of the executive director and the other officers and employees of the Council appointed pursuant to this subsection and the terms and conditions of their employment.

Salaries and
expenses of
executive
director
and staff

(4) The executive director and the other officers and employees of the Council appointed pursuant to subsection (3) shall be paid such remuneration and expenses as are fixed by the Council with the approval of the Treasury Board.

Advisers

(5) The Council may engage for temporary periods or for specific projects persons having a technical or specialized knowledge of any matter relating to the work of the Council to advise and assist the Council in the performance of its duties under this Act and may, with the approval of the Treasury Board, fix and pay their remuneration and expenses.

Not agent of
Her Majesty

15. The Council is not an agent of Her Majesty and, except as provided in section 16, the members, other than members who are employed in the public service of Canada, and the executive director and

PERSONNEL

14. (1) Le gouverneur en conseil, sur recommandation du Conseil, peut nommer un directeur du Conseil.

(2) Le directeur est le fonctionnaire administratif en chef du Conseil et, sous réserve du paragraphe (3), il a la surveillance et la direction des travaux et du personnel du Conseil.

(3) Le Conseil peut

- a) nommer les autres membres de la direction et employés qui sont nécessaires pour mener à bonne fin les travaux du Conseil; et
- b) prescrire les fonctions du directeur et des autres membres de la direction et employés du Conseil nommés en conformité du présent paragraphe, ainsi que leurs modalités d'emploi.

Nomination
du personnel;
fonctions,
etc.

(4) Le directeur et les autres membres de la direction et employés du Conseil qui sont nommés ainsi que le prévoit le paragraphe (3) reçoivent, à titre de rémunération et de remboursement de dépenses, le montant qui est fixé par le Conseil avec l'approbation du conseil du Trésor.

Traitements
et dépenses
du directeur
et du
personnel

(5) Le Conseil peut, à titre provisoire ou pour des travaux déterminés, retenir les services de personnes possédant des connaissances techniques ou spécialisées sur toute question relative à son travail, pour le conseiller et l'aider à remplir les fonctions que lui assigne la présente loi et, avec l'approbation du conseil du Trésor, fixer et payer leur rémunération et leurs frais.

Le Conseil
Sa Majesté et, sous réserve des dispositions
n'est pas
mandataire
de Sa
Majesté

15. Le Conseil n'est pas mandataire de Sa Majesté et, sous réserve des dispositions de l'article 16, les membres, autres que les membres qui sont employés dans la fonction publique du Canada, ainsi que le

other officers and employees of the Council are not part of the public service of Canada.

directeur et les autres membres de la direction et employés du Conseil ne font pas partie de la fonction publique du Canada.

Application
of Public
Service
Super-
annuation
Act

16. (1) The executive director and the other officers and employees of the Council appointed pursuant to subsection 14(3) shall be deemed to be employed in the Public Service for the purposes of the *Public Service Superannuation Act*, and the Council shall be deemed to be a Public Service corporation for the purposes of that Act.

16. (1) Le directeur et les autres mem- Application
bres de la direction et employés du Conseil de la
nommés en conformité du paragraphe 14(3) *Loi sur la*
sont censés être employés dans la Fonction *pension de*
publique aux fins de la *Loi sur la pension* *la Fonction*
publique
de la *Fonction publique*, et le Conseil est
censé être une corporation de la Fonction
publique aux fins de cette loi.

Idem

(2) The *Public Service Superannuation Act* does not apply to the members of the Council, other than members who are employed in the public service of Canada, unless in the case of any such member the Governor in Council otherwise directs.

(2) La *Loi sur la pension de la Fonction* Idem
publique ne s'applique pas aux membres du
Conseil à l'exception des membres em-
ployés dans la fonction publique du Cana-
da, à moins que, dans le cas de l'un de ces
membres, le gouverneur en conseil ne pres-
crive le contraire.

Application
of other
Acts

(3) The executive director and the other officers and employees of the Council appointed pursuant to subsection 14(3) shall be deemed to be employed in the public service of Canada for the purposes of the *Government Employees Compensation Act* and any regulations made pursuant to section 7 of the *Aeronautics Act*.

(3) Le directeur et les autres membres Application
de la direction et employés du Conseil d'autres
nommés en conformité du paragraphe 14(3) *lois*
sont censés être employés dans la fonction
publique du Canada aux fins de la *Loi sur*
l'indemnisation des employés de l'État et
des règlements établis conformément à
l'article 7 de la *Loi sur l'aéronautique*.

FINANCIAL

DISPOSITIONS FINANCIÈRES

Appropri-
ations

17. All amounts required for payment of salaries and other expenses under this Act, including expenses of administration, shall be paid out of money appropriated by Parliament for the purpose.

17. Tous les montants requis pour le Crédits
paiement des traitements et autres dé-
penses en vertu de la présente loi, y com-
pris les frais d'administration, doivent être
prélevés sur les deniers affectés à cet usage
par le Parlement.

Council
charitable
organization

18. The Council shall be deemed to be a charitable organization in Canada as described in paragraph 69(1)(f) of the *Income Tax Act* for the purposes of that Act.

18. Le Conseil est censé être une organi- Le Conseil,
sation de charité telle que la définit l'alinéa *organisation*
69(1)(f) de la *Loi de l'impôt sur le revenu* *de charité*
aux fins de cette loi.

AUDIT

VÉRIFICATION

Audit

19. The accounts and financial transactions of the Council shall be audited annually by the Auditor General of Canada and a report of the audit shall be made to the Council and to the Minister.

19. Les comptes et opérations financières Vérification
du Conseil doivent être vérifiés chaque
année par l'auditeur général du Canada.
Un rapport portant sur cette vérification
doit être présenté au Conseil et au Ministre.

REPORT

RAPPORT

Annual
report

20. The President of the Council shall, within three months after the termination of each fiscal year, submit to the Minister a report on the activities of the Council for that fiscal year, including a financial statement of the Council and the Auditor General's report thereon, and the Minister shall cause the report to be laid before Parliament within fifteen days after the receipt thereof or, if Parliament is not then sitting, on any of the first five days next thereafter that Parliament is sitting.

20. Le président du Conseil doit, dans les trois mois qui suivent la fin de chaque année financière, remettre au Ministre un rapport relatif aux activités du Conseil au cours de cette année financière, comprenant notamment un état financier du Conseil et le rapport de l'auditeur général y relatif, et le Ministre doit faire déposer ce rapport devant le Parlement dans les quinze jours qui suivent sa réception ou, si le Parlement ne siège pas à ce moment-là, l'un des cinq premiers jours où il siège par la suite.

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OTTAWA, 1970

A. Should a "Standards Council of the USA" be established

or

B. Should the existing ANSI be given a Federal Charter with a higher level of governmental participation in its activities, management and financing?

C. If a new "Standards Council of the USA" should be proposed, the following questions should be answered:

1. Should it be an independent quasi-governmental agency reporting to the President? or

2. Should it be established by the Department of Commerce reporting to the Secretary of Commerce? or

3. Should it be attached to an existing Federally chartered institution e.g. The National Academy of Science or Engineering, e.g. through the National Research Council?

4. Should it be financed directly or through the Department of Commerce?

5. What interests should be represented on the Board of Directors?

6. What would be the optimum number of members of the Board of Directors?

7. How should the membership of the Board be balanced as among representatives of Federal, State and local governments, industry (small and big), standards organizations, consumers, educators, lawyers, labor and so on? Which Federal agencies should be represented? Should they be nominated from time to time by the Interagency Committee on Standards Policy? How should representatives of State and local governments be chosen? How many should be included in the latter categories?

8. How should standards organizations in the private sector be represented in the Council, e.g., only by ANSI or otherwise, including organizations not members of ANSI?

9. Should the Council consist of two principal autonomous Divisions, one being the Interagency Committee on Standards Policy dealing with government standards activities and the other being the American National Standards Institute covering activities in the private sector?

10. Would there be any ex-officio members of the Board of officers of the Council identified by their positions in government or in the private sector?

11. Should the members of the Board of Directors be appointed by the President? How otherwise should they be chosen?

12. What fraction of the total membership of the Board of Directors should constitute an executive committee to act for the Board between meetings?

13. How often would the Board and its Executive Committee be expected to meet?

14. Would the officers of the Council be appointed initially by the President and subsequently be elected by the Board?

15. What should be the size and composition of the staff of the Council?

16. Should the Managing Director be appointed by the President or chosen by the Board?

17. What would be a reasonable budget for the Council and what should it provide for?

18. Would the Council become the official representative of the United States in international standardization organizations and be responsible for paying dues? Or should the Council give official authorization to present members and subsidize the cost of representation and participation?

19. Would the Council assume prime responsibility for organizing delegations to technical meetings concerned with the development of international standards or should it confine itself to an advisory or oversight position in connection with such delegations and the position to be taken by such delegations?

20. Would the Council subsidize delegates to meetings on international standards where the national interest requires such subsidization to insure the proper breadth, level and continuity of representation?

21. Would the Council confine itself to designating and listing standards as National Standards, leaving publication and distribution to organizations in the private sector as at present?

22. Would the Council's list of standards include standards developed within government agencies or referred from other sources in their regulations and thereby made mandatory and identified as such?

23. Should the Council become the administrative agency for the national system for accrediting testing laboratories?

24. Should the Council become the administrative agency for U.S. participation in international certification arrangements?

D. If ANSI should be given a Federal Charter with a higher level of government participation, etc. as per option "B" the following questions should be answered:

1. How should the level of government participation be defined and implemented by representation on the Board of Directors?

2. To what extent and how should ANSI be financed by the government? By dues from government agencies? By contracts for specific projects or activities? By subsidization of dues for representation in international standards organizations? By subsidization of costs of administering secretariats of international technical committees? By subsidization of representation in international technical committees? Other activities and means?

3. To promote coordination of activities between the government and the private sector, should the Interagency Committee on Standards Policy be supplemented by an advisory committee organized by ANSI to meet from time to time with the ICSP to plan programs for cooperation in standards development?

Nature, Policy and Functions of a
Standards Council of USA (SCUSA)

1. It would be a quasi-governmental agency established by legislation or executive order either independently or as a subdivision of an existing quasi-governmental organization such as the National Research Council.
2. It would be financed by the Department of Commerce and by fees for services under its supervision such as the accreditation of testing laboratories.
3. Its members would be appointed by the President so as to achieve a balanced representation of affected interests including government agencies, standards development organizations, industry, consumers, educators, the legal profession and states.
4. The Council would have two principal divisions operating cooperatively. The Interagency Committee on Standards Policy would be the government agency standards division. ANSI would be the private sector standards division.
5. The Council would take the final step by publication in the Federal Register of notice to recognize as U.S. National Standards those recommended to it by ANSI through the ANSI Board of Standards Review. This would include international standards proposed for such recognition by ANSI or by government agencies. Consideration would be given to the possibility of creating a body of U.S. National Standards divided into two principal categories:
 - A. Those developed in the private sector or by Federal agencies for voluntary use.
 - B. Those made mandatory by reference in government regulations whether developed in the private sector or, in-house, by government agencies.
6. The Council would serve as the governing board for accrediting certification systems and testing laboratories in accordance with criteria established by the Council, including the ANSI criteria for their accredited certification systems if acceptable to the Council.
7. The Council would be the official representative of the USA to ISO, and also to IEC making use of the U.S. National Committee for IEC. It would pay the dues for these memberships.
8. It would organize delegations to international standards meetings and arrange for a prior definition of positions to be taken by such delegations with an appropriate degree of flexibility enabling delegations to adjust positions in the light of subsequent discussions during the course of such meetings so as to permit achieving compromises not in conflict with basic national interests and policies.
9. It would represent the United States and assist government agencies in implementing any intergovernmental agreements involving mutual recognition of standards and certification systems.
10. It would encourage but not require government agencies to give preference to National Standards as designated by the Council for use by reference in regulations or for procurement.
11. It would reserve the prerogative of establishing a mark of compliance with national standards whenever the use of such a mark might become desirable or necessary.

12. It would provide financial assistance to organizations in the private sector requiring such help in performing services required to satisfy national needs in standardization.

13. It could, if so designated, serve as an oversight board in implementing legislation calling for conversion to the SI (metric) system of measurement and particularly in coordinating conversion by government agencies.

14. Staff of the Council would be employees of the Council, not of the Federal Government.

15. The Council, itself, would meet only three or four times a year to deal with matters of policy. Necessary action between meetings would be taken by an executive committee subject to final approval by the Council as a whole at its next subsequent meeting.

16. Members of the Council would serve without compensation except for reimbursement of travel and living expenses in connection with attendance at Council or Executive Committee meetings.

National Institute of Building Sciences (NIBS)

1. Established by Housing and Community Development Act of 1974, (P.L. 93-383, 42 USC 5301), August 22, 1974.

2. Sec. 809(b)(1) states: "There is authorized to be established for the purposes described in subsection (a)(3), an appropriate nonprofit, nongovernmental instrument to be known as the National Institute of Building Sciences (hereinafter referred to as the "Institute"), which shall not be an agency or establishment of the United States Government. The Institute shall be subject to the provisions of this section and, to the extent consistent with this section, to a charter of the Congress if such a charter is requested and issued or to the District of Columbia Nonprofit Corporation Act if that is deemed preferable."

3. NIBS' board consists of not less than 15 nor more than 21 members, appointed by the President by and with the advice of the Senate (with specified classes of people represented).

4. Sec. 809(b)(6) states: "The members of the initial or succeeding Boards shall not, by reason of such membership, be deemed employees of the United States Government."

5. Sec. 809(f)(1) states: "The Institute is authorized to accept contracts and grants from Federal, State and local government agencies and other entities, and grants and donations from private organizations, institutions and individuals."

6. Sec. 809(h) states: "There is authorized to be appropriated to the Institute not to \$5,000,000 for the fiscal year 1975, and \$5,000,000 for the fiscal year 1976 (with each appropriation to be available until expended), to provide the institute with initial capital adequate for the exercise of its functions and responsibilities during such years; and thereafter the Institute shall be financially self-sustaining through the means described in subsection (f)."

7. Institute reports annually to President for transmittal to Congress.

International Involvement of U.S. Standards
Dr. W.E. Cooper, Consultant, Teledyne Engineering Services
and
ASME Vice President, Codes and Standards

Introduction:

I certainly appreciate this opportunity to address the impact upon U.S. standards - writing bodies of the adoption of their standards as de facto international standards. Although, I recognize that this occurs in other successful standards developing organizations such as American Society for Testing and Materials (ASTM) and American Concrete Institute (ACI), I intend to use The American Society of Mechanical Engineers (ASME) as my organization of reference.

In order for you to appreciate the evolution of a standard or code from a domestic standard to a de facto international standard, I am going to provide a bit of history of ASME codes, standards and related accreditation activities.

ASME pioneered voluntary standards. When ASME began developing performance test codes in 1884, only four years after the Society was organized, the public had no way of knowing what to expect of equipment. Small businessmen and engineers had no baseline against which to write a purchase order. It was nearly one hundred years ago that a small group of ASME engineers decided that codes were needed for performance testing of equipment. ASME, through balanced committees, including such interest groups as manufacturers, users, academia, and research engineers, began developing performance test codes which could be referenced in contracts between manufacturers and users. For nearly 100 years, industry has relied on these performance test codes for equipment ranging from steam turbines to safety valves.

In 1885, ASME organized a Standardization Committee on Pipe and Pipe Threads. In this case, the engineers and allied scientists recognized that for an industrial society to prosper there must be standards to provide for interchangeability.

Another demonstration of the need for codes and standards was in the area of boilers. During the late 1800's and early 1900's, there were thousands of boiler explosions with resulting deaths and injuries. As the suffering mounted and the public became aware of the horrible situation, the politicians at the city and state level enacted individual standards for boiler construction. These standards were not uniform; materials and designs acceptable in one jurisdiction were unacceptable in another, inspectors qualified in one jurisdiction didn't meet the qualifications of another jurisdiction. The result was a maze of various and conflicting standards in different parts of the country. In 1911, ASME formed a Boiler Code Committee to obtain the cooperation of all groups concerned to formulate one overall set of codes and standards for construction, operation and maintenance of boilers. Since then, the Code Committee has been changed in name to the Boiler and Pressure Vessel Committee and in scope to include: power boilers,

heating boilers, nuclear components and systems, nuclear inservice inspection, and pressure vessels (metallic and non-metallic).

The three reasons identified in the preceding discussion for codes and standards:

1. To provide a basis for establishing measures of performance.
2. To provide for interchangeability of part.
3. To provide for protection of public health and safety on a basis uniformly acceptable to governmental authorities.

apply equally well to either domestic or to international activities. However, because the experiences I wish to relate apply to the third, further discussion will be restricted to that aspect.

The ASME Boiler and Pressure Vessel Code as a de facto

International Standard

From the original section of the boiler code in 1915 to the 1980 Boiler and Pressure Vessel Code, rules for accrediting organizations were included in the Code. The intent of the accreditation activity was to provide a visible mark for users and regulatory persons to differentiate between a boiler designed, fabricated and inspected in accordance with the Code from one not meeting Code requirements. This system worked well in the U.S. particularly after the jurisdictions formed The National Board of Boiler and Pressure Vessel Inspectors in 1920 and, the activity was extended from the United States to Canada during the 1930's. This expansion took place by the referencing of the Code on a voluntary basis by the provinces of Canada, and changed a purely domestic Code to one of limited international recognition. Because the provinces of Canada and the states of the United States enforced the Code, boiler and pressure vessel accidents significantly decreased in number. For those boilers and pressure vessels manufactured in geographical areas of the world outside Canada and the United States, the States with the assistance of ASME developed rules for equivalency. The system worked in North America.

Then, during the Kennedy Rounds of Tariff discussions, the United Kingdom charged that the ASME accreditation program was a non-tariff barrier to trade. For nearly ten years, ASME and the National Board explored with the United States State Department mechanisms which would have permitted the ASME to extend its accreditation to the world, without success. In July 1970, the United States Justice Department brought a civil suit against the Society and the National Board alleging violation of the Sherman Antitrust Laws. Through the efforts of government, Society and National Board lawyers, an amicable agreement was reached and signed on September 11, 1972 permitting the Society to extend its accreditation and the National Board to extend its registration of boilers and pressure vessels to any place in the world.

To provide consistency with the various states that make it mandatory to register boilers and pressure vessels with the National Board, the ASME procedures for implementing the agreement require:

1. Any inspection pursuant to the ASME Boiler and Pressure Vessel Code of boilers and pressure vessels to be imprinted with the ASME Symbol shall be conducted by an inspector holding a valid National Board Commission.
2. Each product that the foreign manufacturer stamps with the ASME Symbol shall also bear the duly authorized stamping of the National Board; and the foreign manufacturer shall file manufacturer's data reports with the National Board for each product to which the foreign manufacturer has applied National Board Stamping. (This registration provides a traceability of the boilers and pressure vessels from manufacturer to user.)

It is of interest to note that approximately 60% of the boilers and pressure vessels so manufactured outside of the United States and Canada and affixed with the ASME Symbol and registered with the National Board are used outside of the United States and Canada. In other words, only about 40% of the boilers and pressure vessels manufactured in "foreign" countries and affixed with the ASME Symbol are used in the United States and Canada. The number of foreign manufacturers accredited under the procedures of the ASME Boiler and Pressure Vessel Code have approximately doubled since 1977.

To the best of our knowledge, this was the first instance of federal interaction with a code, standard, or related voluntary accreditation program for the purpose of broadening the geographical boundaries of the activity.

Through the broadening of the geographic boundaries, the Boiler and Pressure Vessel Code became a de facto international standard. This evolution of a Code or Standard to a de facto international standard carries with it certain obligations:

1. Availability

Distribution centers must be established about the world, because a Code or Standard which has evolved or is evolving to the stature of de facto International Standard must be readily available to the potential users.

2. Inquiries

The Standards Developing Organization must prepare its volunteers and staff for increased numbers of inquiries. In the case of ASME, procedures were developed to address inquiries from about the world. The staff and volunteer parts of the codes and standards activity were restructured and increased in numbers to handle inquiries in a timely manner.

3. Participation

As the code or standard is accepted about the world, non-North American residents want to participate. ASME has always provided for input from about the world; however, the level of activity has increased from sporadic to regular. ASME handles foreign participation as it does North American participation. All meeting rooms where proposed revisions, reaffirmations or new standards are being considered are open to the public. Foreign residents who have demonstrated their qualifications for membership on the particular committee through participation on a domestic code or standards committee as a visitor, may be invited to membership.

Through the evolution of a domestic standard to international recognition, the host standards developing organization evolves a document that reflects the technological advances and safety concerns of the world. For example, the Germans and Japanese have had considerable input in writing the rules for layered pressure vessels; the French have participated in nuclear vessel rules; and the Belgians and Swedes in accreditation. These are but a few examples that come to mind. The important point is that foreign nationals need to be provided the opportunity to participate.

Voting on International Standard

One could argue that these foreign nationals get a double opportunity to participate: international standards committee and domestic standards committee. The argument is academic because, as we shall see, it is difficult, if not impossible, to develop an international standard where a strong domestic standard exists which has attained international stature.

However, where an interfacing Technical Advisory Group (TAG) exists, the membership of the TAG which prepares the U.S.A. position on an international standard may be limited to U.S.A. residents.

At the suggestion of the Department of Commerce, several years ago, the American National Standards Institute (ANSI) prepared and approved guidelines for voting on proposed international standards. This was at approximately the same time that ISO changed international documents from "recommendations" to "standards."

In essence, the ANSI Guidelines for voting on international standards provide:

1. Where an American National Standard exists, the TAG can recommend an affirmative vote where:
 - a- the proposed international standard is compatible with the American National Standard

or

- b- the committee responsible for the domestic standard is willing to revise the U.S.A. standard to be compatible with the proposed international standard.

2. Otherwise, the TAG must recommend a negative vote and provide the technical reason for the negative vote.

In our opinion these guidelines are reasonable.

Effect of de facto International Standards on International Standard Development

It is difficult to develop an international standard where there is a dynamic U.S.A. de facto international standard. Let me give you an example through an experience that I had: The ASME Boiler and Pressure Vessel Code is a dynamic de facto international standard; the U.S.A. Code is revised every six months by addenda; the committee meets a minimum of six times per year and subgroups and workgroups often meet more frequently. Section III of the BPV Code covers nuclear power plants.

In 1975 an ISO subcommittee on which I was the U.S. representative requested that the U.S. prepare a draft which de-nationalized the United States rules for nuclear pressure components and submit the draft as a proposed international standard. Section III was carefully reviewed and all references in Section III to national standards or specifications were removed and replaced with wording which, in effect, stated that a particular aspect would be in accord with the standard in effect in the country implementing the international standard. The proposed standard was not accepted but in 1980 the U.S. was requested to try again. Because the domestic standard is so dynamic, it would be difficult, if not impossible, for the U.S.A. to vote in favor of such an international standard. International standards are rather static, there being no mechanism for the issuance of interpretations or the preparation of appropriate revisions.

As another example, ASME is the administrative secretariat for ISO TC-11 covering boiler and pressure vessels. Since the international documents have been changed from "recommendations" to "standards," there is essentially no world interest in developing an international standard.

A Possible Alternative Approach

As noted, we believe the voting guidelines are reasonable, but we also recognize the difficulty in de-nationalizing a de facto international standard to the point and within the time frame for acceptance as an international standard.

As an alternative to re-developing international standards where defacto international standards exist, we recommend that the International Standards Organization recognize the existence of de facto international standards and not establish international standards committees where the standards developer recognizes its international responsibility to:

- a. provide for participation of interested parties from about the world.
- b. develop standards in language that reflects the technological advances and safety needs of the nations reflecting these advances and needs.
- c. refrain from including language in the standard that gives a competitive advantage to a geographical region of the world.
- d. publish administrative procedures and unique national requirements as separate implementing standards.

We are of the opinion that such recognition of de facto international standards would be cost effective, thus minimizing the strain on the world resources. Such recognition would assist the United States in meeting the requirements of the Trade Agreements Act of 1979; Title IV of that Act - Technical Barrier to Trade (Standards) which sets forth how the obligations of the United States are to be carried out. These obligations include those of federal and state governments and of private standards organizations. The Act requires that, in developing standards, federal agencies take into consideration international standards, and if appropriate, base such standards on international standards.

Formal ISO recognition of such de facto international standards as actual international standards could be achieved. Each nation applying such an international standard would have to establish administrative procedures and separate implementing standards, such as permitted national material specifications. In doing this they would have the procedures of the originating country available as guidance.

When de facto international standards exist, we believe this alternative method would be the best procedure to obtain international standardization.

Standards, the U.S. Economy, and Government-Industry Cooperation

by

Alexander B. Trowbridge
President
National Association of Manufacturers

with the assistance of

Gerry Underwood
Manager
Engineering Resource Planning
Deere and Company

Lawrence H. Hodges
Vice President
Technical Affairs
J.L. Case Company

to

Conference on International Standardization
Department of Commerce
Washington, DC
October 16, 1980

Standards, the U.S. Economy and Government-Industry Cooperation

THE subject of standards is still a specialized area given attention mostly by experts, notwithstanding this sizeable audience. Perhaps one can forgive the general public for not having much interest in standards--even though standards affect all of our lives. However, one is less willing to understand some disinterest among those who need to know more--in the private sector and in government. That is why I especially appreciate your attendance here today.

What I'd like to say this afternoon is that standards--both domestically and internationally--are important in the economy and in trade. They will reach new importance as we implement the Title IV of the Trade Agreements Act. However, there are problems we have to resolve before we can begin to achieve true international cooperation in this important area. At home, we have some difficulties between the private sector and government in the management of the voluntary consensus standards system, and we have an even greater challenge in our current economic dilemma. I intend to cover some of those problems in detail and how NAM believes they should be solved. I'm convinced, on balance, that most of our problems in standards and in the economy can only be solved by closer working relationships between industry and government.

In standards, as in some other areas, we have realized to our embarrassment and disadvantage that we are still, in some respects, a parochial nation. The United States has so large an economy, with the equivalent of 50 countries within our federal system, that we have felt generally self-sufficient. We have hundreds of organizations that write standards, hundreds more that formulate codes, and both federal and state agencies that generate standards for safety, health and the environment. Our domestic voluntary standards system alone is so large, so complex, and so effective in assuring the quality of products, that we have hardly considered the larger world beyond. Until the enactment of Title IV of the 1979 Trade Agreements Act, which I will discuss later in some detail, few had noticed that standards could be used as unjustifiable technical barriers between the U.S. and other trading nations.

The real foundations of industrial standardization at the national and international levels are laid in the plant, the place where standards are used in manufacture. In the industrial sectors where they operate, manufacturing companies are the best source of information about the requirements which should be incorporated in national and international standards.

The National Association of Manufacturers, as a trade association representing more than 12,000 of those industrial producers, does not itself write standards. But recognizing the important role that standards play in manufacturing, NAM has an official written policy on standardization. It is both brief and worth noting so I will read it to you:

"Voluntary standards, developed by industry through its trade associations, technical societies, and national testing laboratories and approved as American standards, have made a major contribution to orderly industrial development without impairing the flexibility of enterprise or the generally desirable diversity of industry products available to the public. We believe that American industry should continue to build comprehensive, integrated standards consistent with its advancing needs."

Similarly, NAM has a written policy supporting metric conversion in the U.S. That policy is longer, but it emphasizes an important point common to both policies--their voluntary nature.

As for metrication, NAM has supported metric conversion in the U.S. for many years--particularly metric conversion on a voluntary basis. Conversion is taking place, but slowly. Some members of Congress, reflecting a segment of public opinion, take a very skeptical view of metric conversion. We saw several bills introduced in the first session of this Congress to repeal the Metric Conversion Act of 1975. With due respect for this view, consider the metric system a good example of beneficial international standardization. Here we have a common measurement system, easily learned and understood, used by most of the rest of the world, with the U.S. as the standout exception. Resistance to its adoption in the U.S. is not a good augury for international standards in general. But I am hopeful of change, and NAM is committed to working toward this end.

Meanwhile, the U.S. has a standards system at work which might give us cause to applaud ourselves and sit back in satisfaction. Unfortunately, this is not a prudent cause. However ably the hundreds of standards groups are working to put some order into our domestic system, however widely the voluntary system is supported by individuals and companies that give it time and money, their contributions will be diminished unless we can sort out some serious problems. One of those problems is government.

This situation started in 1976 with then Senator Abourezk and his bill, S. 3555. That proposed legislation might have seriously undermined not only the voluntary consensus standards system in this country, but also the United States' role in the many international forums on standards. If S. 3555 did any good at all, it was to alert the standards community to developing threats to its operations, and raise consciousness among informed members of the public that standards didn't somehow just happen. When the

bill failed to advance in Congress, it seemed that those who shaped the standards system could relax and get on with its work.

But that was not to be the case. The Federal Trade Commission decided to get into the standards act.

When the FTC published its proposed rules to regulate the voluntary consensus standards system, it drew sharp reaction from the private sector. The first wave of responses opposing the FTC proposal numbered more than 1,000. Hearings were held, through the summer of 1979, and hundreds of witnesses were heard. I believe the hearing record now stands at more than 27,000 pages of testimony, cross-examination and rebuttal. No one has computed how much this proposed regulation cost not only the taxpayers but the witnesses, the standards groups, individual companies, lawyers, and association staffs. It would be an instructive case study in cost-effectiveness. NAM, to cite one association, had staff from our law department, our consumer and regulatory affairs department, and our resources and technology department working on it.

Although the proposed FTC rule was slowed down in recent Congressional action, the agency has not quite given up its determination to regulate standards. If the private sector is being drawn into lengthy and costly struggles with its own government over standards, how can we possibly give enough attention to the area of international standards? If the FTC continues to seek to regulate standards bodies, it will surely divert whatever commitments we want to make to international standards activities, and to implementing Title IV of the Trade Agreements Act of 1979.

The Department of Commerce itself is now involved very closely with the domestic standards community--through Circular A-119 of the Office of Management and Budget. This circular was some three years in the writing. It sets up a means by which government can work with the voluntary standards system so that the government itself does not have to develop what it rightly calls "needlessly unique" items. NAM generally supported the Circular, preferring its inherent intent for encouraging cooperation between government and the private sector to FTC's approach.

However, when the Commerce Department got the job of implementing the OMB Circular, new difficulties arose.

Although the OMB Circular and Commerce's proposed rules should be an entirely domestic matter between U.S. standards groups and the U.S. Government, it apparently also is having some overtones for international standards. The American National Standards Institute has taken strong issue with the Department of Commerce's proposed rules as they apply to U.S. positions relating to international voluntary standards activities.

Here is an example of what might be an opportunity for government-private sector cooperation being impeded by government attempts to apply regulation where it may not belong. Although the

private sector pays all the bills, and although the voluntary standards community has received recognition for doing a fine job, the government can't seem to leave well enough alone. Such a divisive impulse cannot but make U.S. involvement in international standards more and more difficult.

An NAM member recently wrote to us and put the problem this way: "Many good standards cannot survive the cost of government control and will slowly die, unable to afford the revisions necessary to stay current because of the added cost of government regulation. This vacuum will be filled either by costly ineffective government standard attempts or lose to foreign standards organizations not burdened by our government control. International Standards Organization standards, the tool of the common market, are presently a serious threat to many U.S. standards. Government intervention in our voluntary standards will strengthen foreign standard organizations, who are, for the most part, unencumbered by government bureaucracy."

Another facet of the standards question is equally serious. The Trade Agreements Act of 1979 contained for the first time in any trade legislation a title--Title IV--relating to standards and considered their role as barriers to trade. Let's look at trade briefly as the larger context of the standards debate.

It's expected that the Trade Agreements Act will open up markets to United States exports in excess of \$20 billion. In return, the U.S. will subject about 15% of its purchases--valued at \$12.5 billion--to open competition.

Although tariffs have been significantly reduced through the Trade Agreements Act, there remain the important non-tariff barriers to international trade. The Trade Agreements Act introduces a number of legally binding codes of conduct affecting such important non-tariff measures as subsidies, countervailing duties, government procurement practices, industrial standards and specifications, and customs valuation.

Despite the growth of international trade, some sixfold since 1967 to more than \$1.3 trillion annually, and the growth in promulgation of product standards, the interaction of the two is still not fully appreciated. Although standards can be perceived as a means of facilitating international trade, they have also had the effect of distorting international trade competition.

I suppose the difficulty in understanding that interaction derives from the purposes behind standards. For example, the reasons for adopting a particular standard may be insulated entirely from international trade considerations. A variety of legitimate policy objectives may serve as a justifiable rationale for a standard. Nevertheless, such a standard may result in serious trade distortions, however unintentional.

Some countries purposely manipulate product standards in order to protect a domestic industry, or they employ a double standard,

requiring an imported product to meet more stringent requirements than a comparable domestic product. I am sure you are aware of Japanese requirements for labeling in metric units that have caused some problems for U.S. exporters of food and drug products; of a company having to ship 100 agricultural tractors in five models to Europe for testing and homologation or type approval; of the situation (very familiar to all of us who have traveled in Europe) of the conflicting electrical systems for a simple electrical shaver. You may have seen that our stores now carry an entire kit of transformers and adaptors for such use.

Yet, for all of its importance, the subject of standards--domestic or international--fades quickly into less significance when I look at America's number one trade problem--our domestic economy. Inflation is eroding the value of the dollar and is blunting our ability to compete at home and abroad. Higher U.S. export prices, while able in some markets to compete where greater inflationary trends exist, nevertheless are not able to balance costlier oil imports. They gnaw away at the price gains brought by falling dollar values on world markets.

Imports continue to flow into our markets, taking advantage of our productivity decline and the impact of energy costs of everything from automobiles to steel to consumer goods. Many of these imports can and should be produced in the U.S. on a competitive basis.

All the while the U.S. is still an attractive market as money from overseas comes in to benefit from high interest rates, and depreciated dollar values offer real estate and other bargains in a country still regarded as politically stable.

It is not altogether surprising that some of our citizens are skeptical of this trend because they have had disquieting personal experiences. I refer to employees who have felt the impact of structural unemployment in a number of traditional industries that once gave this nation its competitive edge in world trade. The human side of economic upheaval has a powerful reality of its own. Were this not the case, the problem would not be drawing political notice.

We continue to hear political candidates reinforce the yearning for painless answers that swells within every anxious breadwinner. But if the U.S. should adopt a posture of protectionism, I can assure you that standards as barriers to trade will seem like a pin in a battle with cutlasses.

What lies at the center of our troubles, what casts such a long shadow across many worthy causes, is the steady and alarming decline in America's industrial productivity growth. Though world perception of the decline of the U.S. economy is in some ways exaggerated, often it is this perception that forms the underlying reason why this country's political influence has been markedly diminishing around the world. Poor economic performance here at home, most notably in connection with inflation and flagging

industrial output, sets outer limits for the dollar's value in relation to other countries. The political significance of this deterioration is not lost upon either individual nations or the great international institutions--the World Bank, the IMF, the GATT--that were made possible in a sense by the great strength of the U.S. economy. In fact, a strong U.S. economy--both actual and as perceived around the world--cannot but contribute positively to international standards and the bodies who seek to make them work and reduce their misuse as barriers to trade.

If America is losing political strength in large measure because it has become economically flabby, it follows that if the country gets its domestic economy back into shape it can once again be able to stay the course in the international political sense--be it protecting our embassies from marauders or helping to make international standards work as a positive force for commerce and trade.

In a world that is infinitely more diverse and interdependent, the conduct of foreign policy on a rational basis would be especially difficult under any circumstances. I firmly believe that a revitalization of American industry will restore not only our productive capacity but our international influence as well.

The National Association of Manufacturers has embarked on just such a revitalization program for industry--not just for this year and next but for however long it takes. The program is designed to deal with inflation in its most fundamental aspects, while at the same time strengthening the U.S. industrial base. Every step in NAM's positive, affirmative program lays the groundwork to support the competitiveness of American export activity and concomitant standards activity--in the swiftly and implacably changing markets of the world.

Sound government fiscal policy is our first objective. For too many years now, Washington's spending has been increasing geometrically faster than the economy on which that spending is based. We have had federal deficits every year since 1969, coupled with huge trade deficits in recent years. It seemed earlier this year that Congress and the President were putting teeth into the effort to balance the budget, but of course, some of those teeth have been pulled, mostly for political rather than economic reasons.

NAM is looking for legislation, not just promises, to limit federal spending to 20% of the economy's GNP--the historical ratio between the spending surges of the 1960's and 1970's. If this doesn't do the job, then a spending limit should be written into the Constitution.

Increased capital formation is NAM's second objective. It is self-evident that American industry needs a great deal of money to modernize plant and equipment and to become more energy-efficient. NAM is working hard on behalf of capital cost recovery legislation, beginning with the "Conable-Jones 10-5-3" bill, as a means to

stimulate new investment and accelerate reinvestment in the productive capacity of this nation. The country's economic policy has for too long centered on stimulating consumption and demand along Keynesian policy lines.

Next comes federal regulatory reform. The use of regulation to achieve legitimate public policy goals requires balance and cost-effectiveness. Plant closings, lost business, increased costs, and reduced competitiveness overseas were not caused by the national commitment to clear air and clean water. But excessively costly regulation--and there are implications here for the standards issue--has contributed to many of these problems. NAM supports regulatory reform through legislation that opens up the regulatory process to rational scrutiny by business and labor alike, perhaps even jointly. Economic impact statements, sunset legislation, regulatory agendas and budgets--all are viable ways of reducing duplication and excess cost.

NAM's fourth goal is enlightened use of natural resources. There is more to this than simply achieving a national energy policy that encourages timely production as well as conservation. Clearly the nation must develop a full range of alternatives to dependence on oil from distant and unpredictable sources. There is the additional necessity of assuring that neither a real nor an artificial shortage of minerals, timber, and essential imported raw materials frustrates this overall strategy for placing new emphasis on the nation's productive capacity.

It is no accident that increasing U.S. competitiveness in overseas markets also is a key step in NAM's six-point program. The trade deficit of the last three years has averaged more than \$25 billion annually. In the context of a balance of payments strategy, NAM has testified that every other country, in the face of growing import bills for oil, has turned to export expansion and import substitution and import policies designed to enhance the domestic economy on a competitive basis.

Improved competitiveness alone won't accomplish our foreign trade objectives. America needs improved access for U.S. goods in foreign markets -- improved access, and a higher degree of fairness in international competition for markets.

Title IV of the 1979 Trade Agreements Act deals with fairness in world markets. In the standards area, we are well aware of the importance of codes dealing with government procurement practices. And I have already cited examples of the specious standards which some governments use to favor domestic products over imported goods.

Underlying NAM's other concerns is the need for improved productivity throughout the economy. The growth of productivity is essential to supply the resources for meeting almost every national objective. Yet look at what's been happening:

From 1948 to 1973, output per hour of work in the private business sector increased by 2.9 percent a year. From 1973 to 1978, the rate of increase was only 0.6 percent a year. The earlier rate doubled output in 24 years. The more recent growth rate, if continued, would take 116 years to double.

As Herbert Stein has observed, the earlier rate allowed our generation to have per capita income twice that of our parents. But at the more recent rate, it would not be until our great-grandchildren were grown up that their per capita income would double our own. Clearly this prospect is unacceptable, and rightly so, to citizens who are still outside the nation's economic mainstream.

Sociologist Amitai Etzioni, a former White House adviser now at George Washington University, looks more deeply into the social fabric that we weave from one generation to the next. He says that if a society is preoccupied with non-work and non-productive matters, it doesn't heed the best efforts of management and labor leaders to boost productivity. On the other hand, a society that prizes productive effort and thrift will support those efforts.

When we talk about productivity, we're talking about nothing less than the values we teach our young--the values which they, in turn, bring to the workplace and to society at large. In terms of legislation, we need a stimulative approach to research and development, patent policies, taxation and other tools of productivity improvement. But in addition, we need a policy focus that reinforces balanced growth as a national objective.

If we are to address every facet of the productivity dilemma, government and the private sector must stop being adversaries. And this need for cooperation is self-evident on the standards issue. I've mentioned the battles with Congress, with the Federal Trade Commission, Circular A-119 giving powers to the Commerce Department over the voluntary standards system, and the set of rules that the Commerce Department has put together to regulate the voluntary standards system. Both OMB and Commerce proclaim their program is voluntary. But there is precedent to support the view that government's so-called voluntary programs are more usually no-choice programs. You either play by the government's rules or somehow you don't play at all.

Government, without a doubt, cannot be excluded from matters negotiated by treaty. But better than dominance by either side would be a real partnership in the standards area that could be a model for cooperation. The standards code is only going to be of use to U.S. business when government and business work together in its implementation. The standards code is a framework. Within that framework, as we develop it, U.S. business is going to have to let the government know when there are violations. The government in turn will have to produce some results when such abuses are encountered.

Richard Goodemote of Sears Roebuck has put his finger on how such a partnership should evolve: As a working relationship develops between the Department of Commerce and the voluntary standards system, Goodemote sees the U.S. policy on standards developing the same way it has in other countries. That is, government and the private sector discuss each other's viewpoints and agree upon the approach to be taken by their nation's representatives in international standards meetings or conferences.

The time has passed when the United States can impose either serious or capricious preferences on an increasingly interdependent world economy. Just as a strengthened domestic economy is essential to improved performance in international markets, a thoroughly cooperative approach to domestic standards is a prerequisite to American participation in the international standards of the world community.

My colleagues and I now will be happy to hear your questions.

Remarks by Thomas B. O'Connell
Group Leader, Technical Office and Advisory Committees
Foreign Agricultural Service
U.S. Department of Agriculture
before the
Conference on International Standardization
U.S. Department of Commerce
October 16, 1980

Establishment and Problems of USDA's Technical
Office, Under Title IV of the TAA of 1979

The Tokyo Round of the Multilateral Trade Negotiations, established for the broad purpose of enhancing the growth and maintenance of an open system for world trading, in which about 85 countries, including all our major trading partners and many of our minor ones participated, ended its roughly five years of sometimes frantic sessions in mid-1979.

The U.S. put together what we saw as our obligations as participants in these negotiations and as a signatory to the agreements (also referred to as codes of conduct) resulting from them. The result of that exercise is the Trade Agreements Act of 1979 and the parallel Statements of Administrative Action, implementing the Act. Title IV of the Act is devoted to consideration of our obligations under the Agreement on Technical Barriers to Trade (otherwise known as the Standards Code).

Title IV requires, among other things, that the Departments of Commerce and Agriculture each establish a Technical Office. The purpose of these offices is to assist their technical agencies, and State, local and private sector organizations to take full advantage of the opportunities provided by the Standards Code.

A Secretary's Memorandum establishing the USDA Technical Office in the Foreign Agricultural Service (FAS) was published in the Federal Register dated June 12, 1980. The substance of the Secretary's Memorandum is taken largely from Title IV of the Act.

Agriculture's Technical Office is small. In order to carry out our functions properly, we must enlist the assistance and cooperation of technical agencies such as the Animal and Plant Health Inspection Service (APHIS), the Food Safety and Quality Service (FSQS), and the Office of Transportation within the Department of Agriculture. In addition, in so far as their duties concern agricultural commodities, we have also arranged to call on the appropriate offices in the Environmental Protection Agency and the Food and Drug Administration. The complete list of these agencies is provided in the Secretary's Memorandum, and its subject matter coverage is very broad.

We have defined some of our initial objectives under the Standards Code, about which we will seek advice from these agencies, as follows:

1. Select proposed U.S. standards for notification, based on such criteria as trade significance among signatory countries; mandatory vs. voluntary standards; and identification of foreign country(ies) affected. We must then notify the National Bureau of Standards (designated as the "Inquiry Point" for these purposes) as quickly as possible, in order to provide signatory countries with maximum time for comment.

2. Identify the significance of foreign proposals regarding U.S. trade. That is, will there be any impact?; if so, on whom?; to whom should a given notification go in the private sector if appropriate?; or State Departments of Agriculture if that is appropriate? The need for promptness, as required by extent of comment periods, must be recognized.

3. List organizations and individuals in State and local agencies, and especially those in the private sector, that may be able to help in standards-related or certification-related functions. With this objective in mind, we have established contact with National Association of State Departments of Agriculture here in Washington to advise us on State and perhaps local agencies in particular situations. In the private sector, we will look for help from ANSI, of course, in addition to the USDA technical agencies, the FAS commodity divisions, and members of the joint USDA/USTR advisory committees on trade (most of whom represent commodity associations).

4. We must assist the National Bureau of Standards in a) determining, with minimal ambiguity, which foreign proposals should be provided to Agriculture, and which to Commerce; and b) identifying U.S. standards and certification-related proposals as soon as they are approved for publication so foreign signatories will have sufficient time in which to register comments.

5. Help USTR build a list of qualified experts willing and able to serve on technical panels in cases coming before the GATT Committee on Standards. These experts may be called upon by USTR to assist in examining disputes to which the U.S. is not a party. They may come from government or from industry. Our original intention to build up such a list has been altered to the more realistic one of addressing issues as they arise and seeking experts on the basis of the requirements of the specific subject matter involved.

The Standards Code is new, and complex. We expect that the GATT Standards Committee will be an extremely busy group, and not the least of its activities at this stage will be the basic one of determining exactly what is and what is not covered by the Code.

A case in point involves the export of U.S. poultry to the EC. The EC Council, some months ago, passed a Directive specifying, among other things, the manner in which poultry for export to the EC Member States must be chilled between slaughter and final packaging for shipment. No requirements were established regarding the characteristics (e.g., microbial levels) of the final product. Thus, these specifications are unrelated to any direct measurements of quality of the final product; rather, they pertain solely to methods used in the processing sequence before becoming the final product. They are, nonetheless, presented as mandatory standards and countries wishing to sell poultry to those EC countries which have adopted the EC Directive and enforce it to the letter must comply.

Standards of the type described above have become known as "processes and productions method" (PPM) standards, and would seem to contravene such Standards Code provisions as that stated in Code Article 2.1 ("[Parties] shall likewise ensure that neither technical regulations and standards themselves nor their application have the effect of creating unnecessary obstacles to international trade.") In the case cited above, strict enforcement of the provisions of the EC Directive by a Member State was announced. The U.S. had very few poultry processing plants equipped to comply with the EC Directive, and we believed we were on relatively secure ground in challenging this step under the dispute settlement provisions of Code Article 14.25 ("...where a Party considers that obligations under this Agreement are being circumvented by the drafting of requirements in terms of processes and productions methods rather than in terms of characteristics of products.")

The EC Member State in question, with the support of all the other Member States and the EC itself, plus Japan and the Nordic countries, countered by declaring that it was their opinion that Code Article 14.25 did not cover such situations unless intent to circumvent their obligations could be proved. Thus, our grounds are not as secure as we had hoped, and the matter remains before the GATT Secretariat and the Standards Committee for eventual reconsideration and decision as to whether Article 14.25 does indeed cover disputes centering on processes and production methods, rather than on final products, as being the basis for mandatory standards.

I would like to close by pointing out some of the advantages we--and you--may expect to gain through our having become a signatory to the Standards Code.

Above all, in my opinion will be the advantage of receiving notifications regarding foreign standards-related regulations before they become final laws, with sufficient time for us, at the Federal, State or private sector level, to provide comment. The mechanism for this type of system has not yet been fully implemented by all signatory countries. In order for such a system to work properly and effectively, each participating country must have, as a minimum, an accessible, regularly published document in which such proposals may be found (such as our Federal Register), and a central inquiry point, at which a complete collection of all U.S. and foreign proposals and regulations of a standards-related nature may be found (such as our National Bureau of Standards). In addition, offices roughly analogous to those of our Trade Representative and Technical Offices may be beneficial, but are left up to the discretion of each signatory as best fits its own needs. At this moment, the U.S. seems to be considerably ahead of other signatories in a number of respects, such as designating offices mentioned above, and in notifying other countries of proposed U.S. regulations.

Another important area in which we stand to profit by being a signatory to the Code will be our gaining access to foreign certification systems and marks. Such access will greatly facilitate the acceptance of our goods and commodities by foreign markets.

Other such areas include, among other things, the alleviation of unnecessarily restrictive standards-related activities, acceptance of our test results on a non-discriminatory basis, and hopefully, and effective dispute settlement mechanism.

There are still areas in which the roles of U.S. agencies, such as USTR, State Department, the National Bureau of Standards and the two Technical Offices must be refined. We are convinced that this will be done in the course of time, and look forward optimistically toward a smoothly operating and mutually beneficial operation under the Standards Code. We look forward also to building closer and closer ties to the private sector.

Voluntary Standards and Federal Regulations: Problems and Promise

Henry E. Thomas
United States Environmental Protection Agency

We have come a long way, a very long way! Looking back just two years ago, one would have thought the voluntary standards system and the Federal government were engaged in a battle from which only one would emerge. But that battle has turned - if not into a love fest - at least into a "let's get on with the job" attitude on the part of both. The Office of Management and Budget has issued instructions to the executive branch of government clarifying, for the first time, the role and responsibilities of the participation of Federal personnel in the voluntary standards process. It also has opened the way for active support of the voluntary sector by Departments and Agencies.

By the same token, we now have the National Policy on Standards. This is truly a monumental piece of work. It is a landmark in that it sets forth the most fundamental policy for all participants in the voluntary standards area. It places some heavy burdens on standards managers, and audit and accreditation groups, if it is to be paid more than glancing attention - more than just lip service.

These two documents establish a new relationship between government and the private standards sector; a relationship not yet fully understood by many who are in the "pits" grinding out the standards. There is considerable education yet to be done to bring to all of the participants' attention the philosophies and policies inherent in the OMB Circular A-119 and the National Standards Policy.

Given the foregoing, the time is clearly ripe for the implementation of these new and most substantive responsibilities which have been placed on the voluntary standards sector and on the Federal government by the enactment of the Trade Agreements Act of 1979. There will be some rocks and shoals to be navigated in our joint endeavors to comply with this new national and international responsibility, which we in the government share with the private standards sector; but there can be little doubt that we will make the passage successfully.

We have, therefore, from our immediate past experience, some promise as to the future. There are, however, some trouble spots ahead, of which we should be mindful.

The provisions of the Technical Barriers to Trade section of the amendments to the GATT, although placing responsibilities on governments to use relevant international standards, where they exist, also has extensive exceptions to this rule. This is of particular importance to those in the Federal government that are charged with protecting the public health, safety and environment; for example, where the government acts largely through the medium of product regulations. The exceptions are such that, absent good will and serious intent to comply not only with the letter but with the spirit of the new responsibilities, Federal regulatory officials may not change their actions greatly in the future from the manner in which they have dealt with standards in the past. I don't think I need to elaborate this point.

There are two matters which appear to need very near term resolution, however, if we are to proceed - Federal regulatory agencies and the voluntary standards process, must proceed together successfully into the international arena pursuant to the GATT requirements.

First, we will need to rethink how we communicate with our international colleagues in the international standards activities field. If the standards being developed by the international voluntary standards sector are known to be intended for governments' subsequent regulatory usage, clearly the governments likely to be concerned must be active participants on, and with, the entire voluntary standards process. If they are not, the voluntary sector is likely to have a, perhaps insurmountable, selling job to do to get the governments to adopt the standards they have developed, or, more likely, the standards will be modified by the governments concerned and the international harmonization we have sought through the GATT will be a nullity. The voluntary standards sector cannot, therefore, for its part sit and wait on the Federal government's participation. It must aggressively seek it out! The OMB Circular makes that task much less formidable now than before its issuance.

Further, the voluntary sector must devise a mechanism by which governments can speak to governments through the medium of the international voluntary standards process. This is not as simple as it sounds. For example, most national standards bodies go to the international standards arena with a single national position. If we in the United States cannot agree in our domestic standards development and review process on a standard acceptable to both government regulators and the private sector participants, what do we send to our international colleagues as the U.S. position? Or, since we like to work by consensus (but not necessarily unanimity), what if all but the government sector agree on a standard? In such a case it would seem that this "minority" view must be transmitted to the international standards participants so that they may recognize up-front that there might well be a serious problem in the U.S. Government adopting a standard it does not agree with, but which might otherwise be agreed upon by the voluntary standards process, and supported by the "U.S. Position." We need, of course, similar information as to whether other governments - not just their voluntary standards organization representation - are in agreement with that position in whole or in part. There is no reason why this kind of communication mechanism cannot be worked into the standards system, but it will need to be done internationally, not just for the U.S. Of course, this applies only to those topics where government responsibilities are involved and the standard is likely to be adopted for regulatory use.

Second, there is the problem of money. This problem seems never to go away. Specifically, the problem is travel money. From a purely parochial perspective for Americans, a great deal of the international standards work is done in Europe. Participation by U.S. representatives to the technical committees developing standards cannot be left solely to those who happen to be employed by, shall I say enlightened, or at least well-heeled, organizations. We in the Federal sector, I can assure you, look critically at our international travel budgets, and they are very, very small. This travel funding situation must be altered. The best qualified person to represent the U.S. view must be the U.S. representative, and the lack of travel funds for that person should not leave the task to his less-qualified but well-funded colleague. If the standard being developed, likewise, is anticipated to be used in government regulations, it may be imperative to have a spokesperson for the government actively participating in the work of the international standards team. At present resource levels I suspect that you will find very little change in government participation if that participation necessitates international travel.

Of course, government representatives certainly would not need to be present for all international standards working group meetings. We would presume that appropriate caucuses and instructions, written if need be, can be given to the U.S. Delegate, and the government can thereby be assured that its position will be clearly and well delivered - perhaps even if the U.S. Delegate is not in personal accord with that position. If we are to work together, successfully, in the new endeavor, such a philosophical, but pragmatic, twist as this, could become commonplace.

These are a couple of observations on problems which several Federal regulatory officials have perceived to full and successful implementation of the government-voluntary standards process partnership when it comes to standards for adoption in regulations. The problems are certainly surmountable, and I am confident that they, like the other problems and issues addressed at this meeting, will be resolved to our mutual benefit - if not complete mutual satisfaction.

Robert W. Peach
Sears, Roebuck and Co.
and
Allen M. Wilson
Electronics Industries Association

Slowly, but inexorably, the building blocks of international product certification are falling into place. The concept of product certification has gone from dream, to theory, to discussion, and now is at the stage where most, if not all, elements of international product certification have been identified. At last, we are at the stage of products and projects, not theory and concept. This conference could be regarded as an encouraging step along the way toward implementation of these much-discussed theories.

This paper is an attempt to provide an objective analysis of the elements of an effective international certification system. Because of the wide variety of opinions about what certification is, we will include basic definitions and objectives. Underlying all of this, however, is our recognition that objective analyses have been made before, and that without an extraordinary amount of cooperation and mutual understanding, these observations will be useless. Accomplishing this will not be an easy task.

In searching out the implications and potential impact of certification, we have contacted knowledgeable experts in industry and have made a review of the literature. Our observations have at times seemed more or less contradictory. We have attempted to reconcile them in order to reach reasonable and meaningful conclusions.

Product certification means different things to different people, but the underlying driving force of the attention to certification is that purchasers, (whether individual consumers or mass purchasers such as retailers, or manufacturers purchasing component parts or materials), want assurance that the product actually received:

- is what they had in mind when it was contracted for, and,
- conforms to appropriate voluntary standards and applicable mandatory standards set by regulatory bodies.

Conversely, manufacturers typically are desirous of a system by which potential purchasers will have the assurance that the product they receive is what they expect. These goals are simple and straightforward, and apply both nationally and internationally. The implications of the concept, however, as well as its implementation, may be exceedingly complex.

Certification is generally regarded as a "formal" process. Yet formal certification schemes (whether national or international) are one, but only one, of many means by which the needs for assurance of quality may be met. My own company has an interest in certification, to the degree that certification schemes provide opportunity to obtain a dependable supply of available products of high quality worldwide. Any addition to our capabilities to assess quality worldwide in the most economical manner is of potential benefit.

The large manufacturer may communicate to the ultimate consumer assurance of product quality through brand identification. Having built up a quality reputation in the marketplace, such manufacturers have a strong incentive to maintain the quality integrity historically experienced by consumers. The large purchaser of similar product from a diverse industry made up of smaller sized manufacturers may depend

little on the assurance from the manufacturers, and develop his own incoming test and inspection controls to assure that received product is satisfactory.

Out of such needs for product quality information and assurance, a variety of plans have evolved. Many of these arrangements do not fall under a strict definition of product certification, yet attempt to serve the same purpose, with varying degrees of effectiveness. And there is one common characteristic that deserves emphasis: certification schemes, when established, are certain not to run automatically. Successful system operation requires careful attention by all parties, with guidance, administration and periodic review by professionally qualified personnel.

Let us consider what product certification is perceived to be, by reviewing the various definitions that have been carefully worked out in recent years. ISO Guide 2-1978 (a)* defines an international certification system as one organized and managed by a governmental or a non-governmental international organization whose membership is open to all countries of the world. ANSI/ASQC Standard A3-1978, Quality Systems Terminology, (b) defines certification as the procedure and action by a duly authorized body of determining, verifying and attesting in writing to the qualifications of personnel, processes, procedures or items in accordance with applicable requirements. ANSI Z34.2, revised 1980, Standard for Self Certification by Producer or Supplier, (c) defines certification simply as the procedure by which a product or service becomes certified. Certification definitions from these documents appear in Exhibits I, II and III.

Combining the ISO and ANSI definitions, we conclude that product certification is defined as:

- a procedure or system
- having its own rules of operation and management,
- intending to provide conformity to a specific standard, technical specification or other applicable requirements
- by a duly authorized body, governmental or non-governmental,
- with an affirmative indication attested to in writing, by a signed document or by mark of conformity.

Formal certification requires a decision as to the characteristics to be certified, defined standards for each characteristic, and a test or inspection method for determining whether individual product conforms to the defined standards. This, in turn, requires assurance that the laboratories or inspection services providing product evaluation be technically qualified to conduct such a service, so that reports of product quality are accurate.

We have never heard it proposed that formal product certification take the place of existing buyer-seller arrangements that are working economically and that provide a high quality product. Rather, a variety of certification schemes are needed to provide cost and quality assurance benefits for products and industries where there is a need for improvement - as well as in cases where regulatory bodies require such certification. However, we want to warn against a tendency to so displace existing systems, if implementing provisions contained in Title IV of the General Agreement on Trade and Tariff of 1979 result in allowing only the more elaborate certification procedures, rather than an appropriate variety.

A number of factors have contributed to the interest in developing a framework for international certification schemes. One factor is economics. Most industrialized nations have large national laboratory organizations which inspect and test (or

*(a) See bibliography at end of paper for reference.

authorize the testing of) both imported and exported product in a wide range of industries, including raw materials, commodities and manufactured product. The comprehensive and effective export controls established by Japan some years ago should be given some of the credit for the upgrading of the quality of Japanese export product (however, there is more to the technique than merely inspection at the international border.)

One element of certification is that each manufactured item from qualifying producers would bear an easily recognizable mark to assure purchasers that the following steps have been taken in their interest:

- a) The product concerned is the object of a standards writing program that has assessed the important criteria for customer satisfaction, and how these important product characteristics are to be measured, evaluated, and reported to assure engineering design aimed at user satisfaction.
- b) The "stream of commerce" utilizes these methods of test and evaluation to generate product supported by an effective quality assurance system, making use of appropriate specifications for the purchasing, manufacturing, distribution and selling of consumer products.
- c) Laboratories of professional competence and integrity have been accredited as able to carry out the methods of test specified in the standards, and evaluate the engineering design against the specifications to assure satisfactory safety and performance.
- d) An appropriate system assures that conformance to design is adequate. This stage includes formal compliance testing where appropriate, as well as a plan for monitoring factory quality control procedures. Often overlooked, but frequently necessary, is a plan for determining and reporting user experience, through complaint reporting, service reports and direct contact with users.
- e) The use of the mark would be monitored and controlled by a system which would include the best input from government, the public, the private sector, and the academic world, combining these elements in the public interest.

Certification plans exist in various forms in many countries. Five or six years ago Dr. Frank LaQue, then serving as Deputy Assistant Secretary for Product Standards in the Department of Commerce, made inquiries to a number of I.S.O. member countries as to the nature of their certification activities. Not long afterwards, a South Asia regional conference was held in Singapore, with proceedings published under the title "Testing and Certification for Export Products in Industrializing Countries." (d) Our review of the reports of the eighteen countries contained in these reports (Exhibits IVa through e) shows that while most have a quality mark system under a government operated plan, a wide variety exists in methods of operation and products covered under the plans. Most countries have national testing laboratories, but many also certify non-governmental labs to conduct tests. Not all quality mark programs are mandatory on all products; some permit voluntary participation. Many programs emphasize type testing, while others set comprehensive inspection requirements for each shipment of exported product. While the data in these charts is not current, nor are its details necessarily accurate, the variety and scope of such programs is apparent. With the international attention to product certification brought about by GATT Title IV provisions, the time may be right for an update survey of the status of existing certification plans worldwide. While this would be a primary concern of ISO CERTICO, the mechanism for developing a register of certification plans would seem worthwhile to consider at this particular time. Perhaps

developing and carefully defining five "Model" certification schemes will provide a more realistic approach to international needs.

In the existing world of international trade, a majority of contacts are typically between private parties, with documentation varying over wide limits of formality and documentation completeness. Agreements depend on a complex interaction of manufacturer capability, purchaser sophistication, mutual trust and understanding for experience, relative understanding of quality requirements, and economics. Even in domestic situations, there are many pitfalls in introducing product certification. Much progress has been made in Canada in establishing the program in a wide cross section of industry. (e) See the booklet published by the Standards Council of Canada "The Second Five Years". The Canadians seem to be experiencing success in product areas where it seemingly could not be done. However, it is my understanding that emphasis in Canada has been on bi-lateral certification, between buyer and seller, under a set of groundrules administered under government sponsored agency direction. (This contrasts with the GATT emphasis on treating all parties equally, a concept which may be utterly unrealistic.)

A substantial number of standards for materials, test methods and product components throughout the world are developed by the voluntary standards system of the United States. Technical input comes largely from qualified representatives of industry (though a substantial number of government participants serve diligently at the committee level, under this largely non-governmental standards development system.)

As standards work extends itself to the international level, we find representatives of American industry serving on ISO and IEC committees (largely under corporate sponsorship) working with representatives of other nations, who are, in nearly all cases, members of governmental or quasi-governmental organizations. Whether or not changes will come into being in the U.S. to sharpen up this process, the potential of product certification maturing as an international control technique creates a level of need that cannot be ignored, since sponsorship exclusively by industry of the U.S. international standards effort is a growing burden.

In the United States, a number of certification schemes are cropping up as a result of requirements of U.S. regulatory agencies, who not only establish product quality requirements, but invoke quality systems requirements as well. Recognizing that certification schemes vary in scope and nature, these programs make use of many of the elements of certification. Those that have come to my attention include:

1. U.S. Food and Drug Administration, for pharmaceuticals and medical devices. The FDA is seeking international agreements for their Good Laboratory Practice.
2. The Department of Agriculture, for commodities such as grain and seed.
3. The Department of Defense, in the aerospace and electronics industries. The Qualified Product List (QPL) makes use of some elements of certification for component procurement. This list is made up of manufacturers who have demonstrated that they can produce a component to a DoD specification. For parts and materials to be made for NATO on both sides of the Atlantic to be truly interchangeable, some forms of a certification program appears necessary, with agreed-on standards, plus test and inspection procedures.
4. The National Institute for Occupational Safety and Health (NIOSH), for personal occupational safety equipment, such as respirators.
5. The Nuclear Regulatory Commission (NRC) which regulates the domestic nuclear energy industry, has certification procedures reaching out

internationally, with reciprocal agreements between nations.

6. The Department of Energy imports solar collectors from Europe under a certification program.

The Department of Commerce investigation of the number of certification programs in use by federal agencies is not complete at this writing, but already lists scores of programs. It is my understanding that a number of these programs involve product produced in other countries.

We have already referred to the new element to certification introduced as a result of the "General Agreement on Trade and Tariff". Under Title IV, Technical Barriers to Trade, in a reference to standards, the treaty is clear in its objective of avoiding the establishment of standards-related activities that create unnecessary obstacles to foreign commerce. The act specifically refers to certification access for foreign suppliers as follows: "Each Federal agency shall, with respect to any certification system used by it, permit access for obtaining certification under that system to foreign suppliers of a product on the same basis as access is permitted to suppliers of like products, whether of domestic or other foreign origin."

As a result, the U.S. now has a further reason to consider the structuring of certification, though not necessarily a mandate to establish certification systems. There is no doubt that other countries see an international certification scheme as a means toward opening up world markets for their products, so this field is a combined opportunity, challenge, and even threat - depending on how we constructively react.

Next, let us consider in further detail some of the elements of certification.

Obviously, if similar testing is being done at many levels:

- by the manufacturer,
- by the laboratory or inspection agency of the originating country, (conducted by or authorized under a governmental program),
- in the receiving country by a national laboratory, and (finally)
- by a sophisticated purchaser,

there is opportunity for reducing costs by eliminating or at least minimizing redundant testing and inspection. This would not be difficult if the recipient country could rely on the documentation from the producing country. However, this opportunity also is likely to require shockingly large effort to do well - and even then may be vulnerable to misuse.

A major advantage of a certification scheme is that it tends to force far better communication as to actual product requirements contracted for. This improved communication in itself should provide more information to the producer, so that product is manufactured in conformance to user requirements. Indeed, it is reasonable to assume that this benefit - improved buyer/seller communication - may be the determining factor in making a certification arrangement worthwhile.

The certification arm of ISO "CERTICO" has identified five types of certification schemes. These are outlined in Exhibit V. All plans require type testing. Depending on user quality requirements, economics and regulatory requirements, surveillance by an organization may be conducted on samples taken from the factory or the open market. In addition, there may be provision for an assessment of the factory quality control system initially and periodically during production or the life of the contract. It is clearly recognized by CERTICO that "Certification" does not

refer to a single scheme applying to all sorts of commodities and products. Consequently, certification cannot mean the same thing in different industries because the control requirements vary so widely.

There is a tendency to envision a single idealized, highly-structured certification system. Experience has shown that this may be intellectually attractive, but simply is not realistic for universal application. Such an idealized system would include the elements already mentioned, standards, formal test procedures, a quality assurance plan operating at the manufacturing plant, qualified inspection and test laboratories, compliance inspection by the purchaser, and a mark identifiable and understood by the user. To many, widespread application of this ideal seems to be "pie in the sky". A totally rigorous system seems unattainable in nearly every situation where economics is a factor.

I would like now to briefly discuss the IEC Quality Assessment System for Electronic Components, which is nearing its operational phase after nearly ten years of international preparation. Currently twenty of the more developed countries are participating in the plan, with eleven countries scheduled for entry into the System as full certifying countries in the charter member first round. Along with the United States, these countries are: Australia, Belgium, Denmark, France, Germany, Ireland, Israel, Japan, Switzerland and the United Kingdom. Several other countries are expected to join as full certifying countries within the next year. Additional countries will enter the System as participating countries but will use the Supervising Inspectorate of one of the full certifying countries. Canada, for example, will use the U.S. Inspectorate.

The overall objective of this pilot IEC Certification Program is to facilitate international trade in electronic components of assessed quality, and to achieve this objective by the implementation of harmonized quality assessment procedures in such a manner that components released in one participating country are equally acceptable in all other countries without the need for further testing. As we all know, this objective can only be achieved by a System that operates with integrity, and appropriate checks and balances. The IECQ-System procedures have been designed to provide the needed integrity through the use of structured organizations in each participating country that operates in accordance with the System's Basic Rules and Rules of Procedure. In each full certifying country there is a National Authorized Institution to manage the System, a National Supervising Inspectorate to initially approve component manufacturers and to additionally conduct qualification approval of individual components. The NSI also conducts surveillance of a manufacturer's certified product production and will conduct audit testing of his certified product. Additionally, a country's organization must also include a National Standards Organization that is responsible for specification management in the country.

In the United States the National Authorized Institution function will be handled by an Electronic Components Certification Board currently made up of representatives of interested organizations, and the producer and user segment of the electronics industry. This fifteen-man Board was organized in 1975 by the U.S. International Committee of the IEC and has been and will be administratively supported by the Electronics Industries Association. Underwriters Laboratories was selected as the U.S. National Supervising Inspectorate in 1977, and has been a major contributor and participant in U.S. effort to develop an acceptable System. The Electronic Industries Association will function as the National Standards Organization for the System.

The specification base for the System is IEC standards. In the initial phase of System operation, these documents are not available in sufficient quantity to cover the total spectrum of electronic components, even though IEC Technical Committees have been quite busy in developing new standards or modifying existing standards for use in the System. The rules provide for the use of Provisional Specifications,

and there is a flexibility at the Detail Specification level where a manufacturer may complete a Blank Detail Specification with his product's attributes and certify his product accordingly.

This has been only a very brief summary of the Quality Assessment System, and I refer you to some additional, more detailed information in the Proceedings in Appendix A.

Certification systems should make provision for responsible manufacturers to certify their own product under an international scheme. In many industries, laboratories available in manufacturers plants are the full technical equivalent of independent laboratories, and their production quality assurance systems meet or exceed any requirements set by a purchasing nation. Provision certainly should be made for these qualified manufacturers to take part in international certification schemes. Indeed, they are certainly already doing so via bilateral agreements now in operation.

The provision for "self-certification" by manufacturers presents the need to determine how much dependence can be placed upon the manufacturer to assume responsibility for product, versus dependence upon a third-party certification program. No one can seriously expect all domestic or international trade to depend solely on the ability, professionalism and integrity of the manufacturer without some other evidence of assured quality. A large purchaser (the "second party") may be in a position to do the complete job of verifying manufacturer capability and establishing a scheme for assuring that purchased components and materials are satisfactory. This can be done by his own personnel at his factory, or at suppliers plants, assuring that the quality systems and continuous test and inspection procedures are adequate for his purposes. We have already referred to conditions where major manufacturers, via the mechanism of brand names and industry reputation, are able to satisfy purchasers and have a motivation to continue that satisfaction in order to maintain their position in the marketplace. There remains a major area in which a third party is needed to provide the assurance mechanism. But since only the manufacturer is able to apply quality assurance principles for effective, continuous control, it becomes apparent that a third-party certification scheme is fundamentally a weak concept, even though it has potential in certain areas. Because of its limitations, easy prescriptions of third-party certification as an answer to product assurance should be avoided. Third-party certification is an available tool for proper application. Certification in any form may not be the best answer for all situations, nor could it be.

A further factor to consider in third-party certification is the degree of responsibility that the certifier can or should assume. I understand that in some nations the third party is equally responsible for the product, and in most others he assumes some portion of the responsibility. This is generally not the case under U.S. practice. I would expect that the purchaser of a product bearing a certification mark would assume that the certifying agency represented by the mark would have a degree of responsibility in assuring that the product meets the standard represented by the mark. That is indeed the understanding of customers purchasing products labeled with recognized private brand names; even the Seal of Approval of Good Housekeeping magazine conveys to the customer that the authorizing organization shares the responsibility for user satisfaction. The need for certifier responsibility should be weighed against the basic Q.C. principle already mentioned, of supplier responsibility for product that he manufactures.

No discussion of certification would be complete without further mention of Underwriters Laboratories, which may be considered the classic example of long-term success in conducting a certification program. (Actually, while the U.L. name is familiar, the details of its certification system are not well understood.)

U.L. operates an effective, self-contained certification system relating to public safety. As a complete system it provides all the elements we have discussed. For example, U.L. identifies safety characteristics and hazards of importance across a broad range of products, develops standards to control such characteristics and eliminate or minimize hazards, tests products to evaluate their engineering design with respect to safety, and monitors conformance to standards and proper use of their proprietary mark, through an extensive inspection force.

Much of the effectiveness of the U.L. system results from meeting the needs of state and local code enforcement agencies. As such, it has some tendency to come in conflict with the federal approach, of preemptive, broadly worded legislation and regulation. However, recently UL has worked more closely with government agencies such as the Consumer Product Safety Commission. U.L. standards are developed using a consensus process, which can take any of several forms, including the canvass method, which again is a process not well understood even by many who discuss it.

Underwriters Laboratories serves as a basically independent third-party, responsible for the accuracy of the tests that are performed under its supervision, for the safety characteristics of production prototypes or for checking on production and field conformance. With respect to conformance to safety requirements, U.L. exhibits a concern for manufacturing quality assurance, through its Follow-up Services activities. As part of the total certification system, they now review in-plant Q.C. activities through formalized procedures. This protects both manufacturers and Underwriters Laboratories.

The activities of Underwriters Laboratories, in operation for most of the 20th century, are a prime example of an economically practical, non-governmental, independent organization serving the needs of both consumers and industry. (We could cite other examples of certification systems in the U.S., such as that of the American Gas Association.) Yet, U.L. safety requirements are seen by some elements of international trade as a non-tariff barrier. This is related to complex factors of language differences, national policy and practice, and even cultural differences beyond the scope of this paper.

As we have mentioned, U.L. is playing an active and vital role in the new worldwide quality assessment system for electronic components which is expected to become operational in the near future, and will serve as the U.S. National Supervising Inspectorate. This program undoubtedly will affect the course of international certification for some time to come.

Before reaching a conclusion that the substantial progress made towards international product certification will ultimately accomplish all that is being envisioned by its proponents, I'd like to speak as a quality assurance practitioner, having worked with a wide range of domestic and foreign consumer product manufacturers.

Over the years a number of basic principles have emerged in our work with manufacturers. Most of these have found their way into the literature and are well documented in industry.

1. Quality must be built into the product. Quality cannot be inspected into a product after its manufacture. In fact, the farther away from the manufacturing operation a deficiency is detected, the more it costs to correct. Furthermore, detection of quality problems further down the production-distribution sequence makes corrective action less effective.
2. The quality system that will deliver "perfect" product for all sig-

nificant characteristics has yet to be devised. Some regulatory agency planners seem to assume that by identifying characteristics, setting standards and calling for a structured control system, all product produced will necessarily meet all user requirements. Even though quality assurance schemes are often capable of delivering very high levels of quality for defined characteristics, provision should be made for determination of the rate and nature of field failures - an information feedback loop from the customer and from later stages of distribution back to the producer. A customer-oriented test and inspection system responsive to user feedback is essential for continual quality improvement.

3. In an industrial environment where products are constantly changing, product standards are frequently, if not routinely, incomplete, or in a continual state of development upgrading. The development of comprehensive standards is a time-consuming task, requires deliberate attention by knowledgeable professionals over an extended period of time. During this time, product is in production using the best available standards. Standard development may take so long that it is conceivable that a comprehensive standard receive consensus approval after the product is no longer in production.
4. While safety characteristics of product receive much publicity, customer requirements cover a wide range of characteristics, including those related to product performance, appearance, workmanship detail and interaction with other products; all of these details require attention for the user to be satisfied. Quality involves both design characteristics observable in a short-run inspection, and long-term "reliability" characteristics; quality is affected by packaging, customer usage instructions, transportation damage, training and skills of repair and maintenance technicians, and care and use by the customer.
5. The manufacturer should invariably be willing to stand fully behind his product. Any plan under which quality responsibility is assumed by anyone other than the producer, (be it the distributor, a government agency or an "independent" organization) provides the opportunity for the quality of future production to deteriorate.
6. All mass-produced product varies, within production runs and between runs. Hence, not all produced product will be "like peas in a pod". With the knowledge of the relationship of manufacturing capability to user requirements, an optimum control system can be developed for each quality characteristic, to provide economic assurance of quality.

I have cited these principles of quality assurance at this occasion, because we may tend to look towards simplistic systems for solutions to complex problems. At times, some of the elements of certification may contradict good Quality Assurance practice; when they do, we cannot expect the results of certification to be fully effective.

One of the tools of certification is a review of factory quality systems, to assure that factory control procedures are appropriate and effective. With the diversity of products and industries, as well as a wide range of production methods, there exists a broad spectrum of quality systems that could be judged appropriate for control of significant characteristics for all quality requirements in a given industry. It is essential that experienced professionals make the judgment as to the suitability of quality assurance systems to meet specific requirements. Unfortunately, there exists in few industries a definitive quality system standard that

lists explicit quality requirements for that industry. (I believe that the aerospace, nuclear power and pharmaceutical industries are notable exceptions to this statement.) Generic quality systems standards are available which itemize types of controls. The ANSI/ASQC Z-1.15 Generic Quality Systems Standard is the most recently developed standard of this type in the United States. The ISO-TC 176 Quality Assurance Technical Committee is addressing the question, and has begun the development of appropriate quality systems standards for use internationally, consolidating the content of the several generic Q.A. standards that now exist in various countries. However, all generic quality systems standards require further development and application by specific industry and product, and such development is equally susceptible to economics, length of time to develop and relative need.

Having considered the various aspects of international certification, we may now address the question of the implication of certification arrangements upon international trade. Certification schemes may be considered for products with a relatively long product life, whose characteristics are relatively definable, and which can be evaluated with tests that are repeatable. A wide range of products may meet these criteria, other than electronic components and products where electrical safety is a factor. Raw materials, agricultural products and other commodities are clearly areas where standards definition is an important factor in international trade, and where certification would seem to be of obvious benefit.

The voluntary standards system as it operates in the United States is unique in the world. Most nations of the world coordinate their standards program under a single government system. Regarding countries which centralize their standards work through a single government body, it is clear how an international certification plan would work. The government standard bodies of two countries would develop mutual confidence in their capabilities, and could expect to achieve the goals of international certification through a formal program. However, consider the difficulties of a country with a nationally authorized laboratory dealing with the United States, where the goal is to have a formal certification plan with a single representative agency.

We all recognize the problems created by the existence of thousands of individual governmental jurisdictions throughout the United States at state, county, and municipality levels. It is not uncommon for these local bodies to require approval of product for use within their local jurisdiction and to designate the approving agency. This practice is quite unlike that of most other countries, where product standards are essentially under the complete control of the federal government. Other nations looking to the U.S. as a partner in a certification agreement, correctly perceive the federal government as not having jurisdiction over such local bodies. As a practical matter, it is essentially impossible for a manufacturer in another nation to achieve approval of certain classes of product where a tangle of local requirements exist. Perhaps the problem can only be faced head-on by conducting a national conference on certification to consider controversial areas such as the possibility of federal preemption of local jurisdiction where such local action is in conflict with the GATT treaty.

Multi-national companies face a problem similar to those caused by the diverse state and local jurisdictional authorities in the U.S. The plant of a multi-national company situated in a foreign country itself may serve markets in neighboring countries. The producer thus faces the problem caused by these purchasing countries each having diverse standards and code requirements. International Certification agreements offer hope of opening up free trade at the international level for such multi-national companies.

It is our contention that all too often there is a serious lack of communication, understanding, and cooperation between the key U.S. participants in international commerce. Furthermore, this is reflected in the fields of international standards,

specifications, and certification in particular. This lack of mutual understanding leads both government and the private sector to become a serious part of the problem, rather than being part of the solution.

The building of international product certification practice has been proceeding in two different mainstreams - one the arrangements made between private parties to facilitate commercial purposes; and the other the arrangements involving government oversight.

Product standards can and are worked out by industry specialists for adoption and use within their industry. Thus far, certification schemes have been developed in much the same way, industry by industry. However, as an international structure of certification systems takes form, the lack of a strong central control under the U.S. voluntary system will become very evident to other nations. The existence of the GATT treaty, with the consequent involvement of the Departments of Commerce and Agriculture in administration, forces facing of the issue of cooperation by government and industry.

With no intention of claiming the wisdom of Solomon, we still believe that a simple prescription can be offered to this assembly. That prescription is "we must all work hard to understand the point of view of all concerned, the realities of what is, rather than what was, or what we wish it were, and recognize the need for compromise with those of good will."

To implement these abstract, over-generalized points, we offer some specific actions for the various participants assembled here - with the comment that the medicine may be bitter in some respects, but necessary for a cure.

Since the great bulk of knowledge resides among manufacturers and international traders, government must resist the temptation to take charge. Rather it must recognize its proper role is to prompt the constructive utilization of existing knowledge - a significant amount of which is to be found in government.

ANSI must recognize that its proper role is to bring to bear the best available knowledge and input to the international scene. It cannot be the protector of private enterprise from government intervention.

In contrast, the private sector, and particularly trade associations, must recognize that there is a role for a constructive government presence in partnership with the private sector, in the cooperative mode that has enabled other national efforts (particularly in Japan) to out-produce, out-plan and out-maneuver most other nations. This group should set to work to develop a National Policy on Certification, using a consensus approach such as was used in developing the National Policy on Standards.

Few will deny the existence of a communications gap between the private sector and federal government's perception of the system needs, and appropriate responses to those needs in such fields as product safety, use of voluntary standards and certification on the domestic scene - and now international standards and certification.

Most knowledgeable participants and observers of international commerce seem to agree that there is a compelling need for a strong and knowledgeable coordinating body to protect the interests of the United States on the international scene. There also seems to be agreement that such coordination should contain the best available knowledge from all available sources.

We think that the need for industry-government cooperation is the prime concern that this group should address - more important than success stories concerning particular systems or ideas. If this gap between available knowledge and its application is not corrected, we fear a re-run of the fiascos such as the attacks by

government on the voluntary standards system and widely publicized criticism of industry by over-zealous regulators. Such activities are counter-productive, resulting in lack of mutual trust and communication.

The conclusion seems inevitable: only with a coordinated program can the United States hope to participate in international certification. Whether such a system operates within the private sector, under a government program, or is operated by a quasi-governmental organization, there is no question that a national policy for international certification will be essential for the U.S. to realize the benefit of international certification.

BIBLIOGRAPHY

- (a) International Organization for Standardization, Certification Principles and Practice, Case postale 56, CH-1211 Geneve 20, Switzerland
(ISO Guide 2-1978 is included)
- (b) American Society for Quality Control, ANSI/ASQC A3-1978, Quality Systems Terminology, 161 W. Wisconsin Ave., Milwaukee, Wis. 53203
- (c) American National Standards Institute, ANSI Z34.2-1978, American National Standard for Self Certification by Producer or Supplier, 1430 Broadway, New York, N.Y. 10018
- (d) U.S. Department of Commerce, NBS Special Publication 438, Testing and Certification for Export Products in Industrializing Countries, Sup. of Doc., U.S. Government Printing Office, Washington, D.C.
- (e) Standards Council of Canada, The Second Five Years 1976/1980, October 1976, 350 Sparks St., Ottawa, Ontario K1R 7S8

CERTIFICATION DEFINITIONS
FROM
ISO GUIDE 2-1978 GENERAL TERMS AND THEIR DEFINITIONS
CONCERNING STANDARDIZATION AND CERTIFICATION

2.25 certificate of conformity : A document attesting that a product or a service is in conformity with specific standards or technical specifications.

2.26 mark of conformity : A mark attesting that a product or a service is in conformity with specific standards or technical specifications.

2.27 conformity certification : The action of certifying by means of a certificate of conformity or mark of conformity that a product or service is in conformity with specific standards or technical specifications.

2.28 certification system : A system having its own rules of procedure and management, for carrying out conformity certification.

2.30 international certification system : Certification system organized and managed by a governmental or non-governmental international organization whose membership is open to all countries of the world.

2.32 certification body : An impartial body, governmental or non-governmental, possessing the necessary competence and reliability to operate a certification system, and in which the interests of all parties concerned with the functioning of the system are represented.

2.33 third party certification system : A certification system managed by a certification body or under its surveillance.

2.34 self-certification : A form of conformity certification in which one or more manufacturers are responsible for conformity certification of their products with no surveillance from any certification body.

CERTIFICATION DEFINITIONS

FROM

ANSI/ASQC A3-1978 QUALITY SYSTEMS TERMINOLOGY

3.3 Certification: The procedure and action by a duly authorized body of determining, verifying, and attesting in writing to the qualifications of personnel, processes, procedures, or items in accordance with applicable requirements.

3.4 Compliance: An affirmative indication or judgment that the supplier of a product or service has met the requirements of the relevant specifications, contract or regulation; also the state of meeting the requirements.

3.4.1 Certificate of Compliance: A document signed by an authorized party affirming that the supplier of a product or service has met the requirements of the relevant specifications, contract or regulation.

3.5 Conformance: An affirmative indication or judgment that a product or service has met the requirements of the relevant specifications, contract or regulation; also the state of meeting the requirements.

3.5.1 Certificate of Conformance (Certificate of Conformity): A document signed by an authorized party affirming that a product or service has met the requirements of the relevant specifications, contract or regulation.

3.6 Conformity: The fulfilling by an item or service of specification requirements.

CERTIFICATION DEFINITIONS
FROM
ANSI Z 34.2-1980 STANDARD FOR SELF CERTIFICATION BY
PRODUCER OR SUPPLIER

certification. The procedure by which a product or service becomes certified.

certified. Attested by the producer or supplier as satisfying the requirements of the referenced standard(s) or specification(s).

producer-supplier certification. Certification by the producer or supplier, on his own authority, that a product or service is in compliance with a designated standard(s) or specification(s).

6. Evidence of Certification

6.1 Formal evidence of certification shall indicate:

(1) Identification of the producer or supplier as the certifier.

(2) Identification of the referenced standard(s) or specification(s).

(3) Statement of conformity with the referenced standard(s) or specification(s).

TYPES OF CERTIFICATION SCHEMES

	TYPE NUMBER				
	1	2	3	4	5
TYPE TESTING	X	X	X	X	X
SURVEILLANCE THROUGH:					
AUDIT TESTING OF OPEN MARKET SAMPLES		X		X	X
AUDIT TESTING OF FACTORY SAMPLES			X	X	X
ASSESSMENT OF FACTORY Q.C.					X

TYPE TESTING

SURVEILLANCE THROUGH:

AUDIT TESTING OF OPEN MARKET SAMPLES

AUDIT TESTING OF FACTORY SAMPLES

ASSESSMENT OF FACTORY Q.C.

Standards and Certification Jurisdictions

Country	National Standards Organization	Standards Developed by	Type of Standards		Testing Laboratories		Product Testing		Quality Mark Certification Products/Scope
			Vol.	Stand.	Govt.	Indep.	Int'l.	Prod.	
U.S.A.	American Nat'l Standards Institute (Private)	Technical committees from industry, commerce, and technical bodies		(for ANSI certified goods)	X			X	ANSI Certified: Products licensed which meet ANSI standards. Tested by independent laboratories.
U.S.A.	Underwriters Laboratories (Private)			(for UL certified products)				X	UL mark. Products: Electrical Products; Building Materials.
Sweden	Swedish Stds. Institute (Government approved)				X			X	SIS-mark. Special rules for every product field. NOTE: Several other certification systems in use - for example, SEMKO (Swedish Institute for Testing & Approval of Electrical Equipment). SEMKO issues S-mark on approved product.
Australia	Standards Ass'n of Australia Incorporated by Royal Charter (Government)			(for Nat'l Cert. mark)		X	X	X	Certification marks are owned primarily by organizations who may use laboratories - their own or others. SAA itself owns the national certification mark and itself licenses particular manufacturers to use that mark.

* Use of mark is voluntary; products or manufacturers using the mark must comply with mandatory standards and/or requirements.

Standards and Certification Jurisdictions

Country	National Standards Organization	Standards Developed By	Type of Standards		Testing Laboratories	Product Testing		Quality Mark Certification Products/Scope
			Vol.	Mark		Domestic	Export	
United Kingdom	British Stds. Institution (BSI)	Technical Committees in conjunction with Executive Board of BSI		X	Appr. by (a) BSI	X	X	BSI-Kitemark: Manufacturers licensed to use mark. Surveillance by BSI inspectors. Products: Plastics; Garden Tools; Bedding; Valves; Power Tools; Car Safety Belts; Pressure Cookers; Pipes; Industrial Safety Equipment; School Furniture; Steel Conduit; Crash Helmets, etc.
				X				NF-mark: Manufacturers licensed to use mark. 22 control & test laboratories to monitor system. Products: Household Goods; Building Products; Packaging Paper; Portable Fire Extinguishers, etc. Scope: NF-mark affixed to 12,000 different items by 1390 licensed manufacturers.
USSR	State Committee for Quality Control (APCQ)							State Quality mark: license issued but only for top-grade products. Products: Hydraulic and Steam Turbines; Electric Motors; Diesel Marine Engines; Diesel Locomotives; Machine Tools; Measuring Instruments; Chemicals
				X	(b)			CSA-mark: on product certified by CSA. factory inspection by CSA inspectors. Products: Fuel Burning Equipment; Plumbing Materials; Industrial Safety Equipment; Architectural Concrete; Glued Laminated Timber; Mobile Homes; Recreational Vehicles, etc. Scope: Certification scheme encompasses 10,000 companies. More than 100 million CSA marks applied to certified goods each year.

(a) BSI also operates own test center.
(b) Major CSA testing facilities in Rexdale, Ont.

* Use of mark is voluntary; products of manufacturers within the mark are covered with minimum standards and/or requirements.

Standards and Certification Jurisdictions

Country	National Standards Organization	Standards Developed by	Type of Standards		Testing Laboratories		Product Testing		Quality Mark Certification Products/Scope
			Vol.	Mandatory	Govt.	Indus.	Int'l.	Export	
Italy	UNI (Ente Nazionale Italiano di Unificazione)	Various industry organizations in conjunction with UNI			X		X	X	Instituto Italiano del Marchio di Qualità:† Grants licenses for certified products. Special quality marks for different types of products †Note: Quality mark for electric appliances and related products administered by Instituto Italiano di Qualita - created in 1951 by four Italian industry associations. Products: Household Gas Appliances; Plastic Products; Cables; Electric Motors; Portable Tools
India	Indian Stds. Institution Sponsored by Government of India				X	X	X	X	ISI Certification Scheme: Manufacturers licensed to use mark. Program administered under Deputy General (marks). Products: Certification Marks Scheme "applies to all products for which Indian Standard specifications have been formulated and published." Although ISI mark is not obligatory, it has been made compulsory for certain products: Aluminum Utensils (export); Teacheat Plywood Panels (export); Flashlights (export); Steel & Steel Products; LP Gas Cylinders & Valves; Wire Ropes
Japan	JISC (Japanese Indus. Stds. Committee) JSA (Japanese Stds. Ass'n)	Technical Committees under Agency of Industrial Science & Technology (AIST) Council of Standards JISC (all under MITI)			X			X	JIS-mark: Manufacturers licensed to use mark on meeting quality system and product requirements. Products: All except agricultural. JAS-mark: Agricultural products.

* Use of mark is voluntary; products or manufacturers using the mark must comply with mandatory standards and/or requirements.

Standards and Certification Jurisdictions

Country	National Standards Organization	Standards Developed By	Type of Standards		Testing Laboratories		Product Testing		Quality Mark Certification Products/Scope
			Vol.	Mark	Govt.	Under Mfr.	Under Mfr.	Under Mfr.	
New Zealand	Standards Ass'n of New Zealand Set up under The Standards Act 1965 (Government)			(for Standard Cert. mark)		X	X	X	S-mark. New Zealand Standard Certification mark. (Licenses for certification of products granted by SAIZ) Products: Electrical; Mechanical; Building; Chemical; General
Norway	Norwegian Standards Ass'n (Private)	Technical Committees from Industry and Interested Parties	X			X	X	Special regulations by product	N-mark. Products: Certain plastic products.
Poland	Central Bureau for Product Quality (Under Minister of Home Trade and Services) (Government)	Polish Committee for Standardization and Measures. Also, Commission of Experts		X	X	Accredited by govt.	X	X	Central Commission for Quality Mark (Advisory group to Central Bureau). Products: Certain Food Items; Electrical Items; Metal Products; Machines; Building Equipment; "Products for general use".
Mexico	General Office of Standards (Under Secretary of Industry & Commerce) (Government)	Standards Consultant Committees	X ⁺	For certain products "on account of health, safety, or public welfare."	Off. Control Lab Dept of Indus. Insp.	Accredited by govt.	X	X	Official Seal of Guarantee. DGN-mark. Products: example - Tequila being formed

* Use of mark is voluntary; products or manufacturers using the mark must comply with standards established and/or represented.

Standards and Certification Jurisdictions

Country	National Standards Organization	Standards Developed By	Type of Standards		Testing		Product Testing		Quality Mark Certification Products/Scope
			Vol.	Stand.	Lab./Inst.	Indem.	Prd.	Typ.	
Germany	German Standards Board (DNA) (Private)	DNA finalizes standards with input from all interested parties (science, industry, testing labs, and users)		X			X	X	DIN-mark (since 1920): Any manufacturer can use mark. System managed by German Ass'n for Product Certification (under DNA)
									Other certification marks in use: Association of German Electrical Engineers: Administers own certification trade mark system (DME) Conducts prototypes and compliance testing through VDE testing and Approvals Institute.
									German Ass'n for Gas and Water Engineering - DIN-DVGW Mark
									Scope: DIN standards represent 80% of the technical regulations existing in Germany.

* Use of mark is voluntary; products or manufacturers using the mark must comply with mandatory standards and/or requirements.

TYPES OF CERTIFICATION SCHEMES

	TYPE NUMBER				
	1	2	3	4	5
TYPE TESTING	X	X	X	X	X
SURVEILLANCE THROUGH:					
AUDIT TESTING OF OPEN MARKET SAMPLES		X		X	X
AUDIT TESTING OF FACTORY SAMPLES			X	X	X
ASSESSMENT OF FACTORY Q.C.					X

TYPE TESTING

SURVEILLANCE THROUGH:

AUDIT TESTING OF OPEN MARKET SAMPLES

AUDIT TESTING OF FACTORY SAMPLES

ASSESSMENT OF FACTORY Q.C.

Introduction to the
International Electrotechnical Commission's
Quality Assessment System for Electronic Components
(The IECQ-System)

General Information

The IECQ-System is a worldwide voluntary certification system for electronic components. The System's basic idea began in Europe in 1966 with France and Germany and the United Kingdom agreeing on a regional plan, the aim and purpose of which was to promote the harmonization of standards and establish testing and inspection procedures to facilitate the interchange of a wide range of products and materials manufactured and distributed within the member countries. As discussions progressed, the plan was elevated to the international action level through the European Commission on Standardization (CEN) and its electrical/electronics arm, (CENEL). The CENEL Plan envisioned that the program would embrace twenty-three part and equipment categories with electronic components and apparatus being the first category. The CENEL Plan, being regional in character and embracing the European Economic Community and European Free Trade Area countries, is not open to membership or participation from countries outside of this group.

The System's Basic Operating Philosophy

The basic objective of the System is to facilitate international trade in quality assessed electronic components through the definition and international standardization of quality assessment procedures in such a manner that electronic components released in one participating country in conformance with the System are equally acceptable in all other participating countries without the need for further testing.

Participation in the System

The System is open to all member countries of the IEC which have established domestic organizations to operate within the System Basic Rules and Rules of Procedure, and which agree to recognize without discrimination the approvals of manufacturers and test laboratories and the qualification approvals of components released in other participating countries. Membership in the plan also entails certain financial obligations in order to enable the System at the international level to be self-financing. Membership in the System is a two-step operation. The country may participate in the System as a non-certifying member through the formation of a National Authorized Institution and a National Standards Organization and the payment of dues. For full membership in the System, in addition to the non-certifying membership mentioned above, the country must additionally have in existence a National Supervising Inspectorate and a Calibration Service. The System is planned to be open to access by manufacturers, distributors, and independent test laboratories in non-participating countries.

Initial Organization of the System

In 1970 the Electronic Industries Association was alerted to the regional character of the CENEL Plan by Dr. Leon Podolsky; and, through the U.S. National Committee of the IEC, we asked that the IEC consider operating a worldwide Quality Assessment System for Electronic Components. The IEC Council agreed to undertake this effort and organized a Provisional Management Committee made up of delegations from fourteen interested countries, the majority of which were from countries which are also active in the CENEL Plan.

Operational Status of the System

During the period 1971-1974 the IECQ-System Provisional Management Committee developed a set of Basic Rules for the System and more detailed Rules of Procedure for the System. The Provisional Management Committee also developed a financing plan. At a meeting in September, 1974, the IEC Council, the ruling body of the IEC, received the reports and recommendations of the Provisional Management Committee. At this meeting, the Council voted by an overwhelming majority to establish and operate the IECQ-System on the basis of the plan developed by the Provisional Management Committee. In the interim the Basic Rules, which are the statutes of the IECQ-System, went through two IEC Six Months' voting cycles and were approved at the IEC general meeting in June, 1977. Earlier at a May, 1976, meeting the IEC Council voted authority to the President of the IEC to convene a permanent system management committee to be known as the Certification Management Committee by invitation to nations desiring to participate in the System. The Certification Management Committee was chartered to work on further refinement of the System's Basic Rules and continue to define the Rules of Procedure and to do other work necessary to prepare for the System operation. The Certification Management Committee was formed through invitations to interested countries to provide two members, and held its first meeting in November, 1976. At its April, 1977, meeting it formed an Interim Inspectorate Co-ordination Committee (IICC) to deal with matters of interest to National Supervising Inspectorates. The CMC and the IICC have, in the interim, worked on refinement of the Rules of Procedure. The CMC has held six meetings and the IICC five. The proposed Rules of Procedure were split into sections to facilitate this effort. The fifth draft of the first eight Clauses of the Rules of Procedure were accepted by the twenty country members of the CMC in 1979 with two of the remaining six Clauses being rejected at the April, 1980, meeting of the CMC. More work on these Clauses are necessary and the language will need to be discussed at a March, 1981, meeting of the CMC, with formal Six Months' voting to follow. (The IEC Council needs only to approve the System's Basic Rules, or changes thereto, and the System's operating budget.)

There are currently twenty countries participating in the international CMC and IICC meetings. These countries are: Australia, Belgium, Canada, Denmark, France, Germany, Hungary, Ireland, Italy, Israel, Japan, Netherlands, Poland, Sweden, United Kingdom, U.S.A., U.S.S.R., Republic of Korea, Switzerland, and Norway. The currently operating CECC or CENEL System in Western Europe includes eleven of these twenty countries: Belgium, Denmark, France, Germany, Ireland, Italy, Norway, the Netherlands, Sweden, Switzerland, and the United Kingdom. Eight of these eleven countries, excluding Norway, Sweden, and Switzerland, but including Luxembourg, make up the European Economic Community. A first step in putting the System into operation is the approval of each full certifying country's National Supervising

Inspectorate by a three-country Examination Team. Scheduling of these visits was proposed and discussed at the April, 1979, IICC and CMC meetings with additional discussion and a proposed schedule being developed at the April, 1980, meetings. This schedule was vetoed by five European countries at the April meetings with the matter being placed before the IEC Council at its June, 1980, meeting with the Council encouraging moving forward with the Examination Visit program. Following the Council meeting all of the eleven first round full certifying countries have agreed to an Examination Visit schedule that will begin in October, 1980, and end in February, 1981. These eleven first round countries are Australia, Belgium, Denmark, France, Germany, Ireland, Israel, Japan, Switzerland, U.K., and the U.S. The U.S. will be visited the week of November 9 by a team made up of representatives from Japan, France, and Belgium. Remaining issues including completion of Rules of Procedure language, to provide details of how access will be afforded manufacturers, distributors, and independent test laboratories in non-participating countries, are expected to occur at the March, 1981, IICC and CMC meeting leading to a possible operational date for System start-up as early as April 1, 1981.

The System's International Organization

The overall responsibility for the functioning of the System is vested in the Certification Management Committee, which operates under the authority of the IEC Council. This Committee is made up of two delegates appointed by the National Authorized Institution of each participating country. Operating under the Certification Management Committee is an Inspectorate Coordinating Committee which is responsible for supervising the uniform application of the System Rules of Procedures. The Inspectorate Coordinating Committee is made up of two delegates appointed by each country's National Authorized Institution of whom at least one shall belong to the National Supervising Inspectorate. Countries which have achieved certifying membership in the System have a right to vote in this Committee. Non-certifying member countries do not have a right to vote.

The System's U.S. Organization

The Rules of the System require that each participating country name a National Authorized Institution as the country's management body for the System, along with a National Standards Organization. If the country desires to be a full-certifying country, it must additionally name a National Supervising Inspectorate (NSI) to be responsible for approval of manufacturers and the quality organization and procedures used to certify individual families of components, along with independent test laboratories and distributors. In 1975 the U.S. National Committee of the IEC voted to name itself the National Authorized Institution and formed an Electronic Components Certification board (ECCB) made up of fifteen members to manage the System in the U.S. In September, 1976, the Electronic Industries Association (EIA) voted to become the National Standards Organization for the System and in December, 1977, Underwriters Laboratories was selected by the ECCB to be the U.S. NSI. In March, 1980, the U.S. National Committee of the IEC named the ECCB as the U.S. NAI and in April, 1980, EIA reaffirmed its intention to provide financial and administrative support of the ECCB. A current U.S. organization chart for the IEQ-System is attached.

Adjudication of Disputes Under the System

Prior to being admitted to the System as a full member, a country must describe its national operations under the System in a written document known as the National Statement of Surveillance Arrangements. One of the elements to be included in this document is a description of procedures for appeal against decisions of the National Supervising Inspectorate, and for approval and disapproval of manufacturers or components certified under the System. The National Supervising Inspectorate controls the use of the Certification Mark of Conformity and can withdraw this Mark permanently, or temporarily, when there is evidence that the manufacturer's certification is incorrect. If the dispute lies between parties in different countries, the adjudication of the dispute will be conducted by the Certification Management Committee.

Electronic Part Specifications to be Used for the System

The System is based on the use of IEC standards, which cannot achieve this status unless there is an international consensus. Standards and specifications for use under the System consist of three levels, Basic, Generic, Blank Detail, and Detail. Basic specifications are of a general nature and deal with environmental tests, sampling procedures, and other broad requirements. Generic specifications apply to a family or a sub-family of electronic components and may include sectional and blank detail specifications. Blank detail specifications contain a list of technical criteria (electrical characteristics and limiting values) necessary to define a component. The electrical characteristics and limiting values to be used for blank detail specifications can be determined by an IEC Technical Committee, a National Standards Organization, or by agreement between the manufacturer and purchaser. Detail Specifications characterize individual components and deal with electrical characteristics, tests, inspection, and other requirements peculiar to that component. In the absence of an applicable IEC standard or specification, use can be made provisionally of another specification provided it complies with the IECQ-System technical format and inspection criteria and is submitted to the NAI for confirmation and to the IEC Certification Management Committee for information and possible IEC Standardization action. It is expected that many existing IEC specifications and standards will be applicable to operation of the System. The family of some one-hundred-seventy IEC Technical Committees and Subcommittees has begun the task of developing the required IEC Standards.

Electronic Part User Interest in the System

Since the part user decision on which part to buy for any application is based on a combination of the cost of the part, the performance of the part, and the quality of the part; the proponents of the IECQ-System believe that a part user will buy a certified part in preference to a non-certified part. From the economics point of view it is hoped that the part user will find that the increased cost of the certified part as opposed to a non-certified part will be offset by a reduction in part user incoming inspection-testing costs and thus the certified part will be more attractive from both a quality and economic point of view.

Electronic Part Manufacturer Role in the System

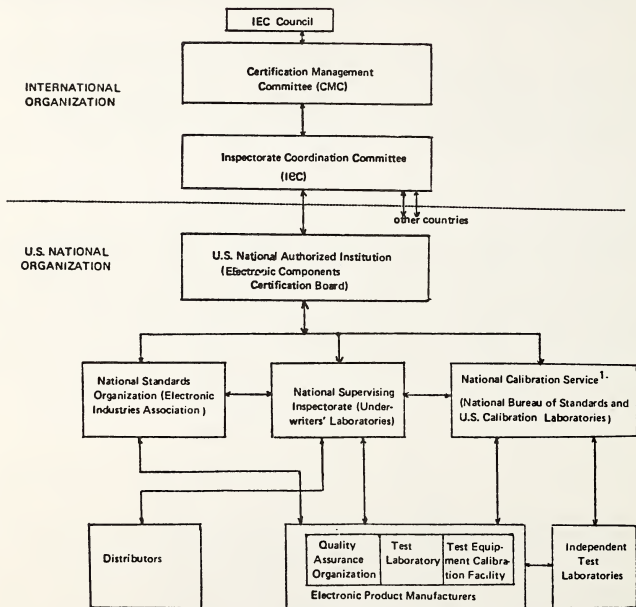
The electronic component manufacturer has probably the most important role in the System. It is he whose organization must operate within the rules of the System by demonstrating to the satisfaction of the National Supervising Inspectorate that his production organization has available for its use such items as process specifications, manufacturing drawings, and control procedures which would control the manufacture of components of the types covered by the component specification. He must also demonstrate that his internal inspection facilities are completely adequate for the purposes of the System and are operated by a staff with the necessary competence and access to necessary test laboratory facilities. The manufacturer must nominate one of his members of his quality assessment inspection department as the Chief Inspector. This Chief Inspector is the primary contact with the National Supervising Inspectorate for the company, and he assumes the company responsibility for the quality of the components that he releases. He also has responsibility for recording results of all inspection tests and to hold them in the company for viewing by the National Supervising Inspectorate. The Chief Inspector also assumes responsibility for application of the certification Mark of Conformity and for overall operation of the company quality assessment inspection department in accordance with Rules of the System.

Financing the System

At the international level the operating expenses of the System are paid out of annual dues assessed against the participating countries. These annual dues are determined by the Certification Management Committee. The proposed annual budget is first circulated to the participating countries and then discussed and agreed to by the Certification Management Committee. The U.S. share of these dues in the evolutionary non-operating phase of the System has been about \$7,000 annually. At the moment the financing schedule for U.S. operation of the System is still under discussion. There will be quite considerable fixed annual operating expenses, currently estimated at \$426,000, once the System becomes operational. It is expected that the System will become self-sufficient financially in its fifth year of operation. Other seed money funding is needed for the first four years.

At the request of the U.S. Electronic Component Certification Board, the U.S. Authorized Institution, EIA in August submitted a request to the Secretary of Commerce that IECQ-System start-up seed money be provided under authority contained in Title IV of the Trade Agreements Act of 1979 wherein the Secretary of Commerce is authorized to make grants and enter into contracts with the private sector to fund for international standardization activities (including certification programs) that will facilitate U.S. international trade. A total of \$418,400 was asked for in FY 1981 with a decreasing grant request amounts being anticipated through FY 1984. In a mid-September meeting with Department of Commerce officials it was learned that the Department of Commerce has no funds currently available for this purpose, that such funds would need to be part of the Department's budgetary development and submittal process with the earliest budget these funds could be routinely included being the FY 1983 budget year that begins October 1, 1982. Additionally, Commerce Department personnel urged that the affected industry in the U.S. find ways to self-finance operation of the System.

THE U.S. NATIONAL IECC-SYSTEM ORGANIZATION



Note 1: The National Calibration Service is the U.S. National Bureau of Standards operating in conjunction with a U.S. network of calibration laboratories.

APPENDIX II

Formal papers prepared in response to a call for papers on topics of authors' choosing, bearing on the subject of the Conference, but which could not be presented at the Conference.

Motor Vehicle Sector

ISSUE PAPER

United States Government Participation
in
International Technical and Regulatory Meetings
Concerning Motor Vehicles

Motor Vehicle Manufacturers Association
of the United States, Inc.

May 30, 1980

Introduction

During the 1980s strategies should be developed that will allow U.S. vehicle manufacturers to compete fairly and freely for global motor vehicles sales--a basic element necessary for the health and continued growth of the U.S. economy.

Governments (U.S. and Other nations) need to realize that differences in vehicle regulations impede this process and result in higher cost production which ultimately means greater expense for the vehicle consumer. Governments, therefore, should carefully analyze their existing and proposed vehicle regulations to determine if the national objectives for which they are intended are worth the added costs, or whether those regulations can be modified to assure the full benefits of the most efficient scale of production, and thus, the ability of their manufacturers to compete efficiently in the global motor vehicle market.

The complete harmonization of regulations, or changes that would degrade the performance of safety systems or reduce the quality of the environment in any country is neither intended nor required. But if common measurement procedures can be agreed upon, the regulators in each country can select the performance levels that are required to meet that nation's societal goals.

United States Government Representatives regularly attend meetings of international treaty-based regulatory groups and U.S. government employees occasionally attend meetings of international standards developing organizations to discuss technical matters related to motor vehicles.

Issue

The objectives of U.S. participation in international technical and regulatory meetings and the procedure by which U.S. positions for those meetings are developed has not been clearly defined by the government. Congress's recent approval of the President's reorganization plan for trade functions provides the framework for definition.

I. Background

To protect the health and safety of their citizens and to achieve improvements in safety, environmental quality and energy conservation, governments throughout the world have adopted, and are continuing to develop standards and regulations which specify certain design and performance characteristics for motor vehicles to be sold and used in their countries. Such regulations often become non-tariff barriers to trade.

Most European governments recognizing that incompatible regulations are a serious hindrance to trade in motor vehicles, attempt to coordinate (harmonize) their regulatory approaches so that trade will flow freely. The United States and Japan, on the other hand, have each pursued an independent regulatory approach.

The most successful harmonization effort has been among the nine countries of the European Economic Community (EEC), which have adopted some 37 directives specifying performance characteristics of vehicles to be sold in the community.

Many other countries of Europe, while not subject to the legal force of the EEC directives, have formulated their own regulatory requirements in a manner which, in most cases, is consistent with the EEC approach.

Another international organization influencing motor vehicle regulations is the Economic Commission for Europe (ECE)--a United Nations activity--which through its Group of Experts on the Construction of Vehicles (Working Party 29) develops model regulations which may be adopted by Contracting Parties. Many of the ECE model regulations also have found their way into the national motor vehicle codes of non-contracting countries.

Existing regulations often reflect the traditions of vehicle design or are based on existing test equipment, rather than being based on any societal goal. However, the common goals of safety and environmental regulations, offer great potential for harmonization.

As other countries outside these structured groups become concerned about vehicular safety, environmental and energy performance, they too adopt regulations. In many instances the new regulations are based on ECE regulations and sometimes on U.S. regulations, but others are entirely different from either of these. This diversity of regulation will likely continue as more and more developing countries become concerned with vehicular safety, environmental and energy matters.

It is in these developing countries that the greatest potential for expansion of motor vehicle sales exists. Since these countries will at least initially look to existing regulatory schemes as a basis for their own national regulations, it is imperative that the range of choices in regulatory schemes be narrowed.

A third international body influential in the formation of international regulations is the International Standards Organization (ISO), an international voluntary standards group. Its Technical Committee 22--Road Vehicles (TC 22), develops recommended test procedures and test devices for virtually all aspects of vehicle design and performance. Acoustical noise from motor vehicles is handled by TC 43; Tires are the responsibility of TC 31. The work and opinions of these groups are highly respected in international regulatory circles. Both ECE and the Common Market call on ISO to develop the test procedures that ultimately will form the basis for regulation.

II. U.S. Government Participation in International Harmonization

The U.S. government, in signing the General Agreements on Tariffs and Trade (GATT) has committed to work within International Technical Standards Developing Groups. In Subgroup 5 of the Agreement, Section 2.3 States:

With a view to harmonizing technical relations or standards on as wide a basis as possible, parties shall play a full part within the limits of their resources in the preparation by appropriate international standardizing bodies of international standards for products for which they either have adopted or expect to adopt, technical regulations or standards.

In The Office of Management and Budget circular on "Federal Participation in the Development and Use of Voluntary Standards," recommends:

Participation by knowledgeable Federal employees in the standards activities of voluntary standards bodies and standards developing groups should be actively encouraged and promoted by Federal Agency officials...

At present, although U.S. government employees attend meetings of both ISO and ECE there appears to be no universally accepted and understood plan of action guiding the participation of these U.S. government representatives to overseas technical and regulatory discussions regarding motor vehicles. Participation by government personnel has often indicated a lack of understanding and instruction about the United States interests to be served by that participation.

A. Development of Comprehensive U.S. Positions

The effectiveness of U.S. delegates would benefit from the establishment of a procedure by which interested and affected parties can contribute technical and economic expertise and information to the development of U.S. positions. The procedure must clearly define the role of participants. The commitment of federal manpower and financial resources is vital to the successful implementation of such a procedure.

B. Delegate Selection and Training

Participation in a treaty based organization such as ECE must be approached in the same manner as participation in any other international diplomatic meeting. The decisions taken at these meetings can have substantial effect on domestic U.S. industry and as a result the U.S. economy.

Representatives of the U.S. government must have status within our government that is equal to the status of other participants within their governments. They must be authorized to participate fully in the discussions of the meeting, to accept agreements in principle and to make at least limited commitments to future action.

Effective participation also requires an understanding of the diplomacy, protocol and ethics of international meetings. Form is often as important as substance in presenting and gaining approval of a national position.

Delegates recommended for overseas meetings should be carefully reviewed and trained where necessary to ensure U.S. representation meets the standards for acceptance in these meetings. Prior to 1967 all U.S. representation at ECE meetings was by career diplomat attached to the U.S. mission in Geneva. The status of ECE has not changed, only the level of U.S. representation.

Technical competence is also a vital prerequisite for delegates to overseas regulatory meetings. Discussions, questioning and negotiation of individual government positions are important parts of overseas meetings. Although final decisions are rarely taken the first time an item is discussed, delegates must understand the technical issues to be able to recommend the proper action in preparation for future discussion.

C. Regulatory Meetings

It is in meetings of ECE WP 29 that individual motor vehicle regulations are finalized. Modifications to test procedures, agreements on performance values and administrative procedures are carefully analyzed and supported or opposed with pertinent information. The U.S. has made valuable contributions in this process by supplying extensive information and research program results. U.S. delegates have been reluctant to use such data to support U.S. positions on issues under discussion and inadequate attention is often given to information furnished by U.S.

The effectiveness and the credibility of U.S. delegates could be greatly improved by more active participation in the meetings. Delegates should continue to furnish research results and other information. In those cases where such submission directly relates to issues under discussion the U.S. delegate should also take the appropriate position in support or opposition. In addition, where domestic rulemaking is in progress, the U.S. delegate should propose the same regulation for consideration by the appropriate ECE committee. That proposal should not be submitted in the form of an informational report on rulemaking activity in the United States. The proposal should be drafted in the form of an ECE regulation, so it will be clearly understood that the U.S. government is proposing it for action within the ECE committee.

Likewise, U.S. delegates must analyze, evaluate, question and support or oppose proposals submitted by other governments. Where those proposals differ from U.S. regulations or regulatory plans, formal U. S. comments should be entered.

None of these actions need in anyway obligate the United States to adopt the final result of the ECE discussions. It can be clearly indicated that U.S. comment or vote on any regulation or any element of a regulation does not constitute an agreement to adopt the resultant regulation.

D. International Standards Organization (ISO)

Direct participation in the technical committees (TC) and subcommittees (SC) of ISO in many cases is the desirable first step toward harmonizing regulations. At this level, U.S. government representatives have an opportunity to contribute to the technical discussion of test methods and devices. A detailed understanding of other national positions can be acquired at these meetings. It provides an opportunity to influence those positions with sound technical data and to reevaluate U.S. technical data as well as regulatory plans in light new technical data.

Sincere participation at the technical level, such as ISO, could save U.S. the embarrassment of attempting to change or reverse programs later at the regulatory level.

Recognizing that direct overseas participation in ISO meetings may not always be possible within financial and personnel limitations, consideration should be given to expanded and improved participation in the activities of the domestic advisory groups developing U.S. technical proposals and positions for the ISO meetings.

These advisory groups already include participation by diverse private sector interests. Addition of government technical experience, knowledge and research findings will certainly elevate the credibility of U.S. positions.

These U.S. positions represent a consensus of the participants. Since this is an exercise of the voluntary standards system, opportunities for opposition and appeal do exist and of course no participant is obligated to accept or implement the consensus decision.

Another benefit of U.S. government participation at this level arises from the opportunity to exchange technical data and opinions on a less formal basis than in a rulemaking action. This broadening of the technical knowledge should contribute to more technically sound regulatory decisions.

III. Conclusion

This paper has presented general suggestions for improvement in U.S. government participation at overseas meetings. These recommendations can be applied to all overseas technical and regulatory meetings which affect motor vehicles. Recommendations for specific overseas activities where efforts toward harmonization can be especially productive are developed in the appendix.

RECOMMENDATIONS
FOR
UNITED STATES PARTICIPATION
IN
SPECIFIC INTERNATIONAL COMMITTEES

Motor Vehicle Manufacturers Association
of the United States, Inc.

May 30, 1980

This appendix sets forth recommendations for U.S. participation in specific international activities where regulations are either as yet undefined or are being considered for major revisions. Sincere efforts toward harmonization in these activities can be productive.

I. Acoustical Noise From Motor Vehicles

The Economic Commission for Europe (ECE) and the Common Market (EEC) currently have in force either a regulation or a directive that limits the permissible noise from light duty motor vehicles.

The United States Environmental Protection Agency (EPA) has announced its intention to regulate those same vehicles. Extensive government sponsored research has preceded EPA's announcement.

The ECE Group of Rapporteurs on Noise (GRB) has undertaken a plan to develop a new regulation on noise to replace the current ECE regulation. GRB concedes the current regulation does not address the most objectionable noise from motor vehicles.

An ISO subcommittee (Technical Committee 43/Subcommittee 1/Working Group 8) has been requested by GRB to develop a new and realistic method of measuring noise from motor vehicles.

The Common Market has not formally declared an intention to revise or replace its Directive on noise. However, the nine countries of the Common Market are represented on ECE/GRB. It is a reasonable assumption that the Common Market would act to align its Directive with a new ECE regulation on noise.

Recommendation

The United States EPA should participate fully in the development of a U.S. technical position by the U.S. advisory committee to ISO/TC43/SC/WG8. This participation should include not only submission of the EPA proposed measurement procedure but the research data from which the procedure was developed.

The opportunity exists to submit to the ISO group, information and viewpoints other than the official U.S. position. If the consensus reached by the U.S. advisory group is not completely acceptable to the EPA, participation in the U.S. delegation to ISO/TC43/SC1/W8 should be pursued.

II. Safety

The ECE is committed to developing new regulations in each of two areas--side impact protection and pedestrian protection. Domestically NHTSA has announced similar intentions. Regulations in these two areas will have a considerable influence on the basic design of motor vehicle structure. Different performance requirements and/or test procedures may dictate domestic vehicle designs that cannot be economically altered to meet overseas requirements.

In each case the form of the regulation has not yet been determined. Research and data gathering is underway in the U.S. to determine pedestrian and occupant injury patterns and severity levels. Development of test devices to simulate human response is in progress. Details of dynamic test procedures are under consideration. While all these activities are progressing in the United States parallel programs are underway in other countries.

A. Side Impact Protection

The ECE Group of Rapporteurs on Crashworthiness (GRCS) is accumulating information on which to base a regulation for protection of vehicle occupants in lateral impacts. Two important elements of that program are being developed through subcommittees of ISO. ISO/TC22/SC12/WG5 is developing an anthropomorphic test device that will simulate human response in side impacts. Another ISO group, ISO/TC22/SC10 is working on the development of an appropriate device to simulate an impacting vehicle.

Recommended Action

Representatives of NHTSA should participate fully in the advisory groups that develop U.S. positions to each of these ISO technical subcommittees. Regular reports on the progress and future plans for NHTSA sponsored research should be contributed to the development of U.S. positions. NHTSA should consider the use of these advisory committees as technical consultants for the development of these sophisticated test devices and procedures to be used in domestic rulemaking.

NHTSA should participate in the meetings of the ISO subcommittees, as part of the U.S. delegation, whenever possible. Such participation will provide a better technical understanding of other national positions and the background will elevate the competence of U.S. participation in overseas regulatory meetings.

The United States delegate to the ECE/GRCS should prepare and submit formal comments on proposals under consideration by GRCS and on informational reports submitted by other countries.

Future domestic rulemaking proposals that are published in the United States should be prepared and submitted, in the proper form, as United States proposals for consideration by GRCS.

B. Pedestrian Protection

The Group of Rapporteurs on General Safety Provisions (GRSG), has on its schedule of work consideration of the need for a regulation to require protection for pedestrians involved in impacts with motor vehicles. Several papers on this subject have been submitted by other governments.

Recommended Action

The U.S. delegate should review and prepare for submission, comments on the papers submitted by other governments. U.S. field experience information developed from government and private sector sponsored accident investigations should be submitted to contribute to the problem identification phase of this international action.

The results or progress reports from on-going research sponsored by NHTSA and others should also be made available to GRSG.

Any domestic rulemaking proposal that results from U.S. information gathering efforts should be prepared and submitted as a United States proposal for consideration by the GRSG.

III. Exhaust Emissions

Among the obstacles to comparisons of the exhaust emissions of vehicles on an international basis are the differing requirements for test cycles and equipment that are used. The U.S. has one set of driving cycles and exhaust gas collection equipment, the ECE countries a second, and Japan a third.

The ECE Group of Rapporteurs on Pollution and Energy (GRPE) and its parent Committee (WP29) are in the process of developing the latest series of amendments (04 Series) to ECE Regulation 15, which specifies limits for emissions of gaseous pollutants from passenger cars. One of the most crucial portions of the document deals with the method for determining the actual emissions on an urban driving cycle.

A major departure of the 04 Series from previous versions of Regulation 15 is a transition from the present European "big bag" method of exhaust collection and analysis to the constant volume sampling procedure (CVS), which is used in both the U.S. and Japan. Adoption of an identical procedure by ECE would greatly ease the burden of certifying vehicles to meet emission requirements on a worldwide basis, since only one type of equipment would then be necessary. It would also enormously ease the comparison of emission levels of vehicles constructed in various countries. As presently proposed, however, the CVS procedure being considered for incorporation in ECE Regulation 15 differs from the CVS procedure used in the US.

Recommendation

The U.S. delegation should participate fully in the GRPE discussion of the 04 Series amendments to Regulation 15, supporting introduction of the CVS technique in a manner that is fully compatible with that presently in use in Japan and the U.S.A.; opposing inclusion of variations that makes comparison of emission levels difficult from country to country; and opposing the inclusion in the Regulation of methods and procedures whose technological accuracy has not yet been established internationally.

Similarly, greater participation and input from the U.S. Government representatives in activities of the technical advisory group for ISO/TC22/SC5/WG2 could expedite preparation of a draft International Standard for introduction to GRPE.

Working Party 29	Safety	NHTSA	Admin.
		NHTSA	Deputy Admin.
	Emissions) Noise)EPA		Admin. Asst. Admin.
GRB	Noise	EPA	Deputy Asst. Admin.
GRCS	Crash- worthiness	NHTSA	Division Chief Crashworthiness
GRDP	Protective Devices	NHTSA	Division Chief Crashworthiness
GRE	Lighting	NHTSA	Division Chief Crash Avoidance
GRPE	Pollution/ Energy	EPA DOE	Deputy Asst. Admin.
GRRF	Brakes/Running Gear		Division Chief Crash Avoidance
GRSA	Motor Coaches		
GRSG	Gen. Safety		Division Chief Crash Avoidance

INTERNATIONAL STANDARDS ISSUE PAPER
FOR U.S. AGRICULTURAL EQUIPMENT INDUSTRY

PREPARED BY
THE
ENGINEERING POLICY ADVISORY COMMITTEE
OF THE
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MAY 15, 1980

INTERNATIONAL STANDARDS ISSUE PAPER
FOR U.S. AGRICULTURAL EQUIPMENT INDUSTRY

The Farm and Industrial Equipment Institute represents more than 220 manufacturers of farm and specialized industrial and construction equipment. Member firms produce and sell more than 90% of the field and farmstead equipment used to mechanize and enhance productivity of farms throughout North America. Through exports and foreign subsidiaries and affiliates, these companies produce much of the farm equipment used throughout the free world. FIEI member companies are engaged in trade worldwide but principally operate in the free world. To accomplish this trade requires considerable, and variable by market, product modification and pre-sale approval by various organizations within countries with the concentration of these countries being primarily in Europe.

Other less obvious barriers to free trade exist in the requirements of Labor Safety Boards (insurance carriers requirements) and in product specification bids written to design rather than performance objective, principally in the third world nations.

This paper deals primarily with certain problems related to agricultural machinery exports. The value of U.S. exports of agricultural machinery increased sharply in the period 1972 to 1976; however, there has been very little change during the last three years. The value of exports in current dollars is shown below:

Total U.S. Agricultural Machinery Exports

1976	\$1.585 billion
1977	1.562 billion - Average Annual Exports \$1.576 billion
1978	1.585 billion

Agricultural tractors account for an average of 30.1% of the above:

1976	\$527.2 million
1977	435.0 million - Average 30.1%
1978	464.4 million

Approximately 57% of the tractors exported go to Canada while the large majority of the balance go outside of North America, mainly to European countries.

In addition to the above total agricultural machinery exports the U.S. exported an average of 402.5 million dollars of parts and components in the years 1977 and 1978. The larger portion of the parts and components go into Western Europe.

Exports of all agricultural machinery, parts and components amounted to approximately 20% of the value of these products manufactured in the U.S. A cursory check reveals that member companies have wholly owned or joint venture manufacturing facilities in the following countries:

U.S.	Brazil	Italy
U.K.	Mexico	Australia
Belgium	Turkey	Japan

Spain
India
Poland

South Africa
France
Hungary

Venezuela
Canada

Standards and regulations applied to products offered by FIEI member companies are controlled by a variety of national and supranational organizations. Considering Europe and North America, it can be noted that most countries in these continents have their own standard activities and that above this level products are affected by ISO, EEC, ECE and OECD standards or directives. Commonly and desirably European regulations are built on the base of these standards or directives; however, it would appear at this time that U.S. regulatory agencies, OSHA, EPA and CPSC, are not considering international standards and regulations in their regulations development. Since standards developed in the above listed organizations can impact the interests of U.S. manufacturers, appropriate liaison with these groups is necessary to allow early warning and the opportunity to prepare a U.S. industry response. Exhibit "A" depicts the chief players and their interrelationship.

Third party test (certification by a recognized testing agency) approval of various products or components is required by many countries. This testing includes tractor performance, roll-over protective structures, seats, engines, glazing, lighting, mirrors, etc. Test stations currently established to conduct such tests are:

U.S. Nebraska Tractor Performance Test only legally required by Nebraska
U.S. Lloyds BS AU 141a Engine Test (representative observes tests by the manufacturer).

The following tests are conducted by the various OECD official test stations:

Austria	-	OECE-Performance	ROPS, Noise
Belgium	-	"	" "
Denmark	-	"	" "
Finland	-	"	" "
France	-	"	" "
W. Germany	-	"	" "
Italy	-	"	" "
Japan	-	"	" "
Norway	-	"	" "
Spain	-	"	" "
Switzerland	-	"	" "
U.K.	-	"	" "
Yugoslavia	-	"	" "

Brazil requires Engine and Field Performance Tests
(government representative observes manufacturers tests).

Ivory Coast requires Engine Test performed at government test station.

There are no U.S. Federal regulations on agricultural machines directed at manufacturers. OSHA requirements are the responsibility of the employer.

Test results at any OECD station, approved by OECD in Paris, are accepted by all OECD countries (with the exception of ROPS - OSHA requires conformance to the SAE standard), but there is no reciprocal acceptance of OECD and Nebraska tractor performance test results. This non-reciprocal condition also exists worldwide in various other engine, ROPS, noise, smoke, glazing, etc., test requirements.

Major concern areas, prioritized, where the Department of Commerce should concentrate efforts are as follows:

1. Early Warning of Developing Directives/Regulations/Standards

To allow the opportunity to exert whatever influence possible and to provide consideration for impending requirements in forward model planning, it is necessary that the U.S. industry be aware of developments which will affect their products.

Recent EEC directives on lighting, cab dimensions, smoke, field of vision and the ROPS static test codes were too far along to influence when they were first heard of in the U.S.

U.S. companies without European contacts are currently under a severe disadvantage if they plan to sell in the European market. Active participation and attendance by the Department of Commerce at the working group meetings in EEC and ECE would permit obtaining copies of working documents which can be reviewed and comments prepared by U.S. industry for use by the U.S. representative. No other feasible means has been developed to insure securing such information. Additionally, the Department of Commerce should be an active member in working groups in ISO, as well as the above groups to provide an image of governmental awareness of subjects under discussion and the appearance to the world of national solidarity on the issues involved.

2. Tractor Performance Testing

Results of performance testing either to the OECD code by an approved test station or as reported by the Nebraska test station are not reciprocally accepted. Since there are only isolated instances where countries insist on an OECD report, there is not a significant problem currently. Nevertheless, it is felt that efforts should be made to establish reciprocity of OECD and Nebraska test reports, or optionally designate a government agency empowered to grant an OECD report based on witnessing the test at a manufacturer's facility.

3. ROPS

Roll-over protective structures are subject to regulation in most developed countries. Conformance of the product to the OECD "Standard Codes for the Official Testing of Safety Cabs and Frames Mounted on Agricultural Tractors", is generally accepted as proof of performance worldwide, excepting the U.S., where OSHA requires conformance to the OSHA requirement, which is generally based on SAE standard, J1194. Conformance to the OSHA standard is not accepted in Europe.

The basic difference is that the OECD ROPS test code is more severe in energy requirements but does not consider the effect on the structure of low temperature climatic conditions which is covered in the SAE standard. However, since there are no known records of fatalities attributed to failure of European or American ROPS and since dual test requirements are costly, the Department of Commerce should strive for reciprocity of acceptance of test results or harmonization of the test requirements. Harmonization could be achieved by both OECD and SAE accepting the ISO standard.

The European regulations requiring compliance with the OECD test code and the U.S. OSHA requirement on ROPS creates a non-tariff trade barrier on both imports and exports.

4. Homologation (Inspection)

Various countries require homologation of products prior to approving sale in their countries. Homologation is primarily an official inspection of design documentation, inspection of the actual machine and testing to verify compliance with regulations. This process is also sometimes referred to as "type approval". In order to provide an uninterrupted supply of products to sell, it is either necessary to stockpile current models or to build prototypes for homologation purposes sufficiently in advance of regular production to allow for the time required for homologation (2 weeks to 18 months). Either approach is costly. Subjective interpretation of the requirements by the inspecting official can also cause delay in approval and costly emergency changes. Relief is needed by arranging for foreign homologation officials to come to the U.S. manufacturers location, at the U.S. manufacturer's expense, to conduct the homologation or type approval on early production units or engineering prototypes (See Exhibit "B").

5. Development of Foreign National Standards

Many countries do not have national standards covering agricultural machines. Certain countries--Mexico, Argentina, Venezuela--are reported as being in process of developing such standards. To prevent trade barriers that will arise as the result of each country independently developing their own standards, they should be encouraged to accept SAE/ASAE standards and to participate in development of ISO standards. Underdeveloped countries in this category that have large market potential are:

Argentina, Brazil, Mexico, Venezuela, India,
South Africa and Lybia.

6. Japanese Homologation

Two agencies are involved in approving agricultural equipment in Japan:

- . Ministry of Agriculture and Forestry (MAF)
- . Ministry of Transport (MOT)

The problem in obtaining approval for new products in Japan is that the MAF only accepts application for approval once a year (spring), and because of this, the homologation approval can take 12-18 months. The specific timing to make application, which also requires the product to be immediately available for test, does not blend with new model production timing which can occur at any time during the year. Because of the specific application timing, the manufacturer has two options, neither of which is very desirable, and they are to stockpile products of the design being replaced to cover the 12-18 month period (inventory cost) or to build complete prototype products (high cost) as opposed to using production units. Unless either of these are done the flow of goods will be interrupted. Conversely, Japanese imports to the U.S. must undergo a test at the Nebraska test station if they exceed 20 HP and are to be sold in Nebraska; however, they can immediately receive a temporary permit and the test is planned to fit the Nebraska schedule; thus, no interruption of sales. No other U.S. states require third party testing for approval to sell.

There is no problem with MOT since they accept application four times a year.

Recommended U.S. Government Action

- Establish active participation and attendance at the working group meetings in EEC (Brussels), ECE (Geneva), to obtain copies of working documents to which industry can make replies which could be used by the U.S. representative as appropriate. Currently material is late, generally received with publication of the "Official Journal" or 2 to 3 years after work has started. This presents a severe disadvantage to companies without European contacts if they plan to sell in the European market.
- Participate in working groups in ISO and OECD to provide an image of governmental awareness of the subject under discussion and the appearance to the world of national solidarity on the subject involved.
- Strive for reciprocity including certification of products which require compliance with regulations.
- Encourage U.S. regulatory agencies to base future regulations on international standards.

Additional Comments from FIEI

- FIEI is satisfied with ANSI's participation in ISO; however they recommend that the Department of Commerce be represented at ISO meetings.

- FIEI is not satisfied with the U.S. Government's activity in OECD and ECE. They should be more actively involved in the early drafting of proposals to insure U.S. interests are expressed and protected.
- FIEI stands ready to assist the agricultural group in COPANT in any way that is possible. Although COPANT has not been active in this field for the last several years, some desire has been indicated by various standards organizations in South America to establish standards for agricultural machinery. They should be encouraged to work with North American standards bodies, rather than accept all European standards.

ISO

The International Standards Organization (ISO), which enjoys consultative status with the EEC and ECE, is composed of the national standards activity of each participating country. The U.S. standards activity is the American National Standards Institute and the U.K. provides representation through the British Standards Institute.

The participating countries are scattered throughout the world and represent a wide expression of opinion. Delays in reaching a common understanding within the ISO have resulted in desire on the part of the EEC and EFTA to formulate standards for Europe more quickly which are enforceable by legislation. Therefore, a new organization was formed - the Committee European Normalization (CEN). A CEN standard can be formulated from either national standards or standards developed by ISO. Up until now CEN has been active mostly on standards for electrical goods but it is now turning its attention to farm machinery.

OECD

In addition to ISO, the formulation of international test codes for farm machinery has been undertaken by the Organization for Economic Cooperation and Development (OECD). This organization, which is located in Paris, has a membership from 24 nations located in Europe and other countries, including the United States and Canada. OECD draws financial support from member governments and, in the case of the U.S., the State and Commerce Departments are contributors. OECD has completed test codes for agricultural tractors and engines used in tractors. Test codes already have been adopted by the member nations and the OECD also is preparing a set of safety regulations for issue to their member countries. It is anticipated that the proposal will be used in part by EEC and ECE in the formulation of their safety proposals for tractors and farm machinery. Currently, the U.S. is officially represented by the Department of Commerce.

OSHA

The Occupational Safety and Health Administration (OSHA) under the U.S. Department of Labor, is a federal regulatory body that imposes regulations, related to the safety and health of the worker, on the employer.

SCC

The Standards Council of Canada (SCC) is the official standards body for Canada and is their representative in the ISO.

CEMA

European Committee of Associations of Manufacturers of Agricultural Machinery (CEMA). It is an organization composed of manufacturers, organizations of 12 European countries. The headquarters is located in Paris. CEMA has observer status with other organizations such as ISO, EEC, ECE and some communication with FIEI.

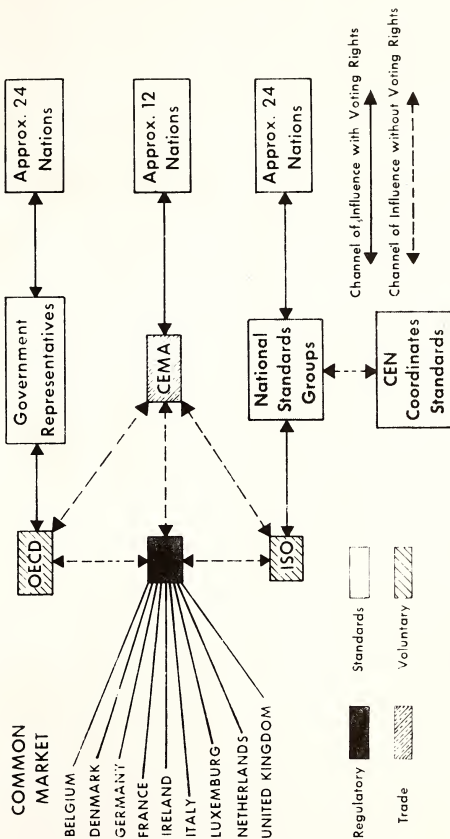
CEN

The European Committee for Coordination of Standards (CEN) is headquartered in Paris. Its membership is composed of the national standards organizations in sixteen countries which include the Common Market and European Free Trade Association area. The purpose of the group is to harmonize the differences in national standards, however compliance is voluntary.

COPANT

The Pan American Standards Commission (COPANT) was organized under the authority of the Inter-American Economic and Social Council in 1961. It is recognized by the Organization of American States as an organization for coordination of the work of various standardizing bodies in Latin America. It is composed of fifteen member nations. There is no mandatory compliance with COPANT documents.

EUROPEAN Input to Standards



NORTH AMERICAN

Input to

International and European Standards

CANADA

Ministry of
Industry,
Trade & Commerce

CFIET

CSA

Standards Council
of CanadaCanadian
Advisory Committee

USA

U.S. Dept. of
Commerce

ECE

SAE

ASAE

ANSI

ISO

Director General
for Normalization

DGN

Standards

Regulatory

Trade

MEXICO

Channel of Influence with Voting Rights

Channel of Influence without Voting Rights

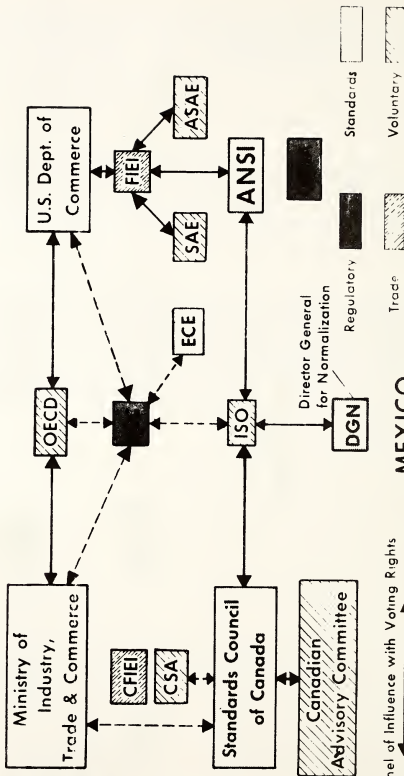


EXHIBIT 2

HOMOLOGATION TEST REQUIREMENTS

Description	Country Requirements									
	Austria	Belgium	Denmark	Finland	France	Germany	Italy	Norway	Sweden	Switzerland
1. Noise										
. Drive by	X			X		X	X		X	
. Stationary	X			X	X	X				
. Operator ear			X					X		
2. Shock										
. Free acceleration					X					
. Steady state				X		X	X		X	
3. Engine										
. DIN						X				
. BS AU 141a						X				
. Muffler & marking					X	X			X	
4. Brakes										
. Tractor	X		X	X	X	X	X	X	X	
. Tractor/Trailer					X					

Documentation REQUIREMENTS

EXHIBIT B-2

Description	Country Requirements									
	Austria	Belgium	Denmark	Finland	France	Germany	Italy	Sweden	Switzerland	U.S.
1. OECD cab (ROPS) test report with approval number.	X	X	X	X	X	X	X	X	X	X
2. DIN power curves observed by T.O.V. as Basisdon.	X		X	X	X	X	X	X	X	
3. BS M1114 smoke and power tests						X				X
4. Tractor/cab (ROPS) rollover data (LBC approval) requires C.G. location and moments around rear axle.										
5. Windscreen glass approval certificates.	X	X	X	X	X	X	X	X	X	X
6. Name, Address and Approval Numbers of: - Lights, Reflectors - Rear view mirrors	X				X	X				
7. Kerb weight of vehicle with cab (ROPS) and weight distribution.	X	X	X	X	X	X	X	X	X	
8. Switch - distance from exhaust manifold to cab roof.			X	X	X	X	X	X		
9. Provide engine and chassis serial numbers of first units.					X	X	X	X		
10. Provide Operators Manuals			X	X				X		
	ⓧ	Sweden accept	OECD test	if tested to Swedish procedure and NR curves are supplied for homologation.						

DRAWINGS REQUIREMENTS

Description	Countries										Other
	Austria	Belgium	Denmark	Finland	France	Germany	Italy	Norway	Sweden	Switzerland	
1. Tractor/Cab (ROPS) dimensions and weight, engine, seat, and plate and size of passenger seat.	X	X	X	X	X	X	X	X	X	X	X
2. Cab cladding - Material specs, dimensions and part numbers. Type of safe/glass. Trim and acoustical material.	X	X	X	X	Included in OEM Test Report	X	X	X	X	X	X
3. Cab (ROPS) main dimensions, material specs, bolt and bracket sizes of all structural members, and dimensions. Location and size of welds.	X	X	X	X	Included in OEM Test Report	X	X	X	X	X	X
4. Cab visibility sketch.					X						
5. Rear view mirror visibility sketch, dimensions and specifications.					X						
6. Schematic drawing of all steering linkage include ratio.	X	X	X	X	X	X	X	X	X	X	
7. Sectional view of hydrostatic steering actuator.	X					X					
8. Schematic diagram of hydrostatic steering system.	X					X					
9. A cutaway drawing of the engine is required.						X					

Description	Country Requirements									
	Austria	Belgium	Denmark	Finland	France	Germany	Italy	Sweden	Switzerland	Other
10. Schematic diagram of service brake and handbrake systems.	X	X	X	X	X	X	X	X	X	
11. Sectional view of all fuel tanks. Include - dimensions, material specs and pressure.					X			X		
12. Exploded view of muffler show part number and manufacturer identification location.	X	X	X	X	X	X	X	X	X	
13. Vertical exhaust mounting flange dimensions. Muffler diameter at top.			X	X		X		X		
14. Tractor/trailer power braking with description of system.					X					
15. Gearbox and final drive powerflow. Gear box and axle ratios. Ground speeds.	X	X	X	X	X	X	X	X	X	

Note: 1. Related drawings for Germany

- Front wheel rim and discs
- Rear wheel rim and discs
- Clutch assemblies
- Clutch disc
- Clutch cover plate

- Power assist and hydrostatic steering pump. Include: Pump capacity and relief valve setting
- Steering motor
- Service brake shoes or discs

- Service brake and y
- Service brake lining material
- Transmission hand brake disc
- Transmission hand brake assembly
- Transmission hand brake lining material

2. All readings for France must be in French.

Type Approval of Scales

by

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Introduction

Type, or "pattern" approval is a requirement, usually enacted into law by a federal governmental body, that subjects new equipment designs to the scrutiny of a national measurement laboratory. In the case of scales, type approval laws are enforced to assure that devices are designed to be durable, free of fraudulent features, are permanent in their adjustments, and that they weigh accurately. Scales are evaluated also in terms of their appropriateness for the intended use: to weigh gold, groceries, grain, sand and gravel, livestock, etc. These laws empower the government to evaluate and approve designs prior to the manufacture, distribution, or sale of weighing equipment within its jurisdiction.

Type Approval Law

In the United States, there does not exist an all-encompassing federal weights and measures law that sets standards for scales and other commercial measurement equipment. Although given this authority by the U.S. Constitution, Congress has chosen to permit the states to enact their own legislation, with notable exceptions: Congress enacted a law in the 1920's regulating the weighing and sale of livestock, in the mid 60's regulating packaging and labeling, and in the 70's - grain weighing for export.

Type Approval Jurisdictions

Presently there are eighteen (18) jurisdictions - states, cities, and federal agencies - involved in the type approval of scales. Laws establishing approval authority require that manufacturers submit the design and prototype (the first model) to these federal, state and city agencies for an engineering evaluation to assure accuracy, permanence and suitability, and compliance with all other technical requirements.

Very few of these agencies have qualified engineers capable of performing credible evaluations and few are equipped with adequate facilities for testing: mechanical, electrical, temperature, vibration, etc.

Scale manufacturers recognize these conditions and yet are required to submit their designs and prototype equipment to each jurisdiction, a process that takes many months. The system makes no provision for reciprocity - states do not recognize each other's

approval, states do not recognize the federal agency's approval, nor does the lone city department recognize its own state. To compound these administrative problems, the scale manufacturer must also cope with non-uniform technical requirements.

Type Approval Standards

Although all states and federal agencies have adopted in principle, National Bureau of Standards Handbook 44, technical requirements for commercial weighing and measuring devices, the standards applied are varied and non-uniform in many respects. For example, certain states prohibit 1/4 and 1/2 pound unit price computations on retail food scales while others do not; a few states require special scale pits and foundations for motor truck and railway track scales while others accept the manufacturer's recommendation; a few states require sheds or houses over certain scales; some require a special deck, or weighbridge, for scales; some states prohibit specific designs that are acceptable elsewhere.

Costs

Agencies are not uniform in their charges for type approval. Two states and one federal agency charge the manufacturer for this service. Typically, these direct charges covering labor, travel, per diem, laboratory use, etc., total \$500 to \$2500; however, the "hidden" costs may be many times these figures. The cost of type approval is borne by taxpayers of fifteen jurisdictions. Other hidden costs include approval delays caused by a backlog of requests, extensive field tests lasting several months, and expenses associated with shipping and set-up at each jurisdiction by the manufacturer. Delay in the introduction of a new product may be the greatest cost of all, in terms of sales and service. A major manufacturer estimates that the total cost of approval for each new model or product is \$50,000. This figure includes internal costs incurred by the manufacturer, electrical approvals, federal, state and city approvals, and type approval by foreign governments for scales sold abroad.

International Type Approval

Manufacturers selling scales in the international market are required to submit new products for type approval in many countries where scales are sold: countries of North and South America, Africa, Asia and Europe, including Canada, Australia, South Africa, Japan, etc. The EEC "Common Market" nations of Europe conduct a reciprocal type approval program for mechanical scales, for which they have adopted standards of design and performance. A single approval by a Common Market country will be accepted by other EEC countries. Today, however, it is necessary to have each European national laboratory approve a new electronic scale design as EEC standards have not been adopted for these weighing devices. National laboratories of West Germany, France, U.K., Netherlands, Sweden, Switzerland, Italy, Belgium, and others, conduct approval evaluations for scales marketed within their borders

and apply in principle, recognized international standards, the International Recommendations of the International Organization of Legal Metrology (OIML), a treaty organization to which the U.S.A. belongs.

OIML Mark

To reduce the cost and delay associated with type approval and to assure high quality equipment, the OIML is considering an OIML Mark of quality which would serve as an indication that the equipment had been tested and approved by a qualified national laboratory. The OIML Mark will likely become an important factor in the future international market for scales. The industrialized and developing countries may require an OIML Mark on all scales imported to their countries, manufacturers believe. Thus, it is important that we have in the United States an internationally recognized program of type approval for weighing equipment. International trade will likely depend upon it.

National Type Approval Program

Domestically, we have parallel concerns. The present system manifests the need for a national type approval program, centered at our national measurement laboratory, that provides design and performance evaluations acceptable to all levels of government, nationwide. A scale approved by the national laboratory should be "legal for trade" in each of the fifty states and by the federal government. If national type approval were based on international standards (i.e., OIML), approvals would likely be recognized internationally. Such a program should result in reduced costs, reduction in duplicity of approvals, and assurance of high quality scales in the domestic and international marketplace.

Summary

A U.S. scale manufacturer engaged in international distribution must satisfy type approval requirements of fourteen states, one city and three federal agencies in addition to each foreign country in which he markets his product.

U.S. type approval requirements are established by state law and are based upon National Bureau of Standards Handbook 44 and individual state and federal regulations. Although relatively uniform in themselves, laws are enforced in a non-uniform manner - the practice of evaluation and program administration varying widely. Few agencies are adequately equipped and staffed.

Costs for type approval are borne by the manufacturer and taxpayer. Costs may reach several thousands of dollars, depending upon the extent of approval necessary: federal, state, foreign countries.

International standards for scales are based upon OIML International Recommendations. These standards form the basis for

foreign type approval evaluations. An OIML Mark of quality may be required in the future on scales imported by industrialized and developing countries.

A United States national type approval program is necessary, many believe, in order to establish credibility in the approval process for scales on a national and international basis. Congressional enactment of a federal type approval law would transfer authority from the states to the federal government. The National Bureau of Standards could provide the appropriate laboratory facility and expertise for type approval evaluations acceptable to all.

INTERNATIONAL STANDARDS FOR MEDICAL EQUIPMENT:

A STRONG U.S. MARKET POSITION THROUGH AN EFFECTIVE U.S.

NATIONAL STANDARDS PROGRAM

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20 October, 1980

ABSTRACT

International standards are becoming increasingly important for U.S. manufacturers and the U.S. government. This is particularly true in the area of medical equipment as a result of the increasing worldwide interest in health care. Many of the United States' world trade partners have taken steps to regulate their health care systems. These controls are often incompatible from nation to nation.

The forces for change imposed on national standards by the GATT standards code should reduce these incompatibilities; and herein lies opportunity for the United States. The competitive position of the United States in the world market can be improved by influencing the development of international standards for medical equipment. The basis for that influence rests primarily on the development of an effective U.S. national standards program which has the capacity to make a significant contribution to, if not lead international standards in this field.

This paper will use standards activities for anesthesia equipment as an example to illustrate and support the thesis that the most important measure for the U.S. is to establish a strong U.S. standards program. Such a program in the area of medical equipment will improve the general health and safety of the U.S. people and establish a strong U.S. manufacturing position in the world market.

INTRODUCTION

In the last several decades, the Western nations of the world have become increasingly interested in health care. There is a growing feeling that some basic health care must be provided. This increased interest has focused attention on drugs and medical equipment. Safety and effectiveness of drugs have been concerns in most Western nations and Japan; concerns that have been addressed by laws. More recently, several countries have passed laws to assure safety and effectiveness of medical equipment, e.g., the U.S. 1976 Medical Device Amendments to the Food, Drug, and Cosmetic Act and, the Federal Republic of Germany's extension in 1980 of its general technical equipment safety law to apply to medical equipment.

The various controls that the United States and its world trade partners have taken to regulate their health care systems have evolved separately in these countries. These controls are often very different and incompatible from nation to nation. In the United States for example, restrictions are placed directly on manufacturers while in the United Kingdom control is effected indirectly through the government-run national health care system.

GATT STANDARDS CODE

In all these nations standards are to play an important role in assurance of safety and effectiveness of medical equipment. The recent General Agreement on Tariffs and Trade (GATT) section on Technical Barriers to Trade, known as the GATT standards code, require the U.S. and its trade partners to reduce incompatibilities between standards from nation to nation. In the future standards should be used less as artificial barriers to trade. This provides the opportunity for an increase in the U.S.'s export business, but it does not guarantee it. The GATT standards code is a necessary but not sufficient condition for increased U.S. exports. It is an important step forward.

U.S. SYSTEM FOR INTERNATIONAL STANDARDIZATION

The U.S. is involved with international standards primarily through the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). Many have expressed the opinion that improvements need to be made in the U.S. system for participation in international standardization. Three papers given at this conference specifically addressed the issue of changes to this system. The suggestions ranged from minimal adjustments to major overhaul. There are problems in the U.S. system of participation in international standards. Communication up and down the hierarchy is often poor, not only between the U.S. technical advisory groups and the American National Standards Institute (ANSI), but also between ANSI and ISO or IEC headquarters. This difficulty may be due to a great extent to the geographical distance from New York to Geneva. U.S. technical preparation is often inadequate due to miscommunication, poor timing, and lack of documents. Due to prior discussions and agreements between European Economic Community (EEC) partner nations, a U.S. counter position may carry little weight. It is interesting to note that the U.S. and Canada do not even attempt to align their positions for increased strength, although this may be changing in the near future. There certainly are problems and many solutions have been proposed to improve the U.S. procedures for participation in international standards activities, but, as with the GATT standards code, none will guarantee increased U.S. export business.

A STRONG U.S. NATIONAL STANDARDS PROGRAM

The U.S. international standards system should be improved and the GATT standards code is an extremely important improvement, but if the U.S. does not look beyond these two improvements, we are sure to fail in a most important area - enhancing the U.S. position in the world market. For the U.S. to improve its position in the world markets, it must take advantage of the opportunity the GATT standards code provides. It must increase its involvement with international standards, especially to increase the quality and quantity of the U.S.'s technical input. If the U.S. relaxes with the GATT agreement in hand, then U.S. products that meet international standards will be entering world markets 5 years behind its competitors. To be ahead in the standards area, the U.S. must be involved -- leading and providing input to the system, not following. A progressive and active U.S. standards program can provide for increased safety and effectiveness of medical equipment while enhancing the U.S. world market position.

Two specific examples from my own experience on international product standards for medical equipment contrast the results of strong and weak U.S. national standards efforts. American National Standards Committee Z79 has been developing standards for anesthesia medical equipment since 1956. The Z79 committee has been a well-organized, strong, active group with continuous participation and support of: the professional society representing nearly all anesthesiologists, the American Society of Anesthesiologists (ASA), most manufacturers of anesthesia equipment, the armed forces medical arms, and the U.S. Food and Drug Administration's Bureau of Medical Devices. ISO committee TC121, the international counterpart of the Z79 committee, was formed in 1966. The impetus for its formation came primarily from the U.S. and U.K.

In the late 50's the Z79 committee embarked upon writing a standard for anesthesia ventilators or breathing machines, used during anesthesia to support a patient's breathing. A well-developed U.S. draft standard was presented in 1967 at the international standards meetings for ISO/TC121. This document formed the basis for the draft international standard for that piece of medical equipment. With

the backing of U.S. manufacturers and users, the draft was taken seriously and considered carefully. The U.S. position was strong as we had already thought out the problems, made the practical compromises between the "perfect" device and the real-world saleable device, and built the background rationale to support the requirements in the standard. Each year before the annual ISO/TC121 meetings the foreign delegations would consider the most recent draft and ask themselves the questions that the U.S. delegation had thought about and resolved several years before. In 1974, the final result of this process was an agreed upon international standard for breathing machines that was essentially the U.S. document. U.S. manufacturers preparing to meet the standard upon entering the world market had an international standard that they understood, accepted, and had known about for almost 6 years.

In contrast is the present draft international standard for Anesthetic Gas Scavenging Systems, devices designed to remove from the operating room environment anesthetic gases spilled by the anesthesia machine. The device is to mitigate that occupational safety problem for operating room personnel. In 1975 an effort began in the U.S. to write a standard for these systems. The first draft was dated June 10, 1976. The Netherlands, in particular one professor and several manufacturers, had been considering the problem of OR pollution for several years. For that reason, in the fall of 1976, the Netherlands supported the formation of a new subcommittee to deal with OR pollution and was subsequently named secretariat to that newly formed committee. In each of the following 3 years up to the present, the Netherlands has had its draft standard on the table for the annual discussion. During those 3 years we in the U. S. have had an active committee producing 13 drafts of our standard requiring at least as many meetings, but have found ourselves in the awkward position of trying each year to make our standard compatible with the draft international standard from the Netherlands. The U.S. technical backing at ISO has not been the strongest primarily due to restricted international travel budgets by industry resulting in minimal participation. Consequently, we have not been able to sway the votes in order to mold the international draft to match our draft.

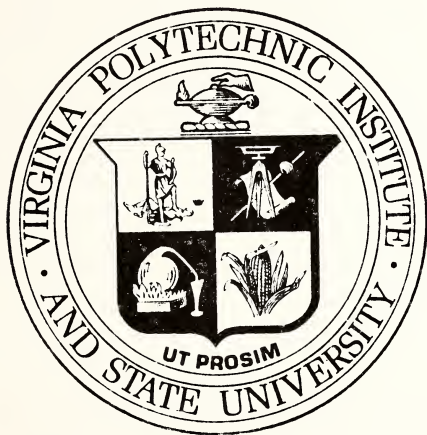
This year an almost complete Gas Scavenging Systems Standard was passed, in spite of U.S. objections and a U.S. negative vote. It appears that this standard will become the international standard in the near future. Within a year, the U.S. draft standard will become an American National Standard -- a standard that is significantly less stringent in several areas for good reasons. U.S. manufacturers will have one standard to meet for the U.S. market and a different standard for the export market.

It is my belief that a stronger U.S. position would have led to more compatible standards. Had the U.S. progress on a standard been well ahead of the world, and had the U.S. representation been greater permitting the U.S. to present a more solid technical front, the U.S. and international standards would have looked more alike. A stronger national standards effort on a Gas Scavenging System Standard and increased participation and technical input would have precluded the negative results.

In summary, although it is valuable to discuss changes to the U.S. international standards system and to look to the GATT standards code for help, the U.S. must develop a strong national standards program if it hopes to increase its export market in the modern world while providing for the basic health needs of its people.

PALLET STANDARDIZATION, VITAL TO INTERNATIONAL TRADE

Prepared for Conference on International Standardization
held in Washington, D.C., October 15 - 16, 1980



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The Wooden Pallet

The wooden pallet, a portable platform for storing and moving materials and merchandise, did not exist as we know it today prior to World War II. A typical stringer-type warehouse and exchange pallet is shown in Fig. 1.

During 1979, we produced 296 million pallets in this country, which sold for 2.38 billion dollars and used 18 percent of all the lumber manufactured, that is, 6.8 billion board feet, as well as 207 million pounds (5175 carloads) of fasteners, mainly nails and staples. The phenomenal growth of the wooden pallet industry, shown in Fig. 2, is expected to reach an annual production of 400 million pallets by 1985 according to some industry sources.

This wooden pallet of the future will be an engineered structure in the light of the research undertaken during the past two decades and under way. A four-year in-depth engineering study of the wooden pallet is to make it possible to design the optimum pallet for a given purpose and use and to make the computerized design available to all concerned. This two-million-dollar overall pallet-research project, involving more than 19 man/year research scientists, is sponsored by the pallet industry-representative National Wooden Pallet and Container Association (NWPCA), the Forest Service of the U. S. Department of Agriculture (USDA), and Virginia Polytechnic Institute and State University (VPI&SU).

According to the 1972 census of manufacturers, the pallet industry is composed of 1160 establishments. Less than 500 pallet plants produced three-quarters of all pallets. As few as 77 plants had 100 and more employees and 424 pallet plants had 20 to 99 employees. Numerous additional small companies produce pallets regularly for sale through intermediaries and to fill local needs; and many plants produce captive pallets to fill their company's own requirements. Some 375 industry-leading companies make up the total NWPCA membership.

Today's wooden pallets are used more or less effectively and efficiently as expendable or reusable pallets. Many of them are exchanged between plants, cities, regions, states, countries, and continents. While approximately 300 million pallets are expected to be produced in this country during 1980, possibly as many are being manufactured in the rest of the world. With the production potential continuously and rapidly increasing in the developed as well as the developing countries all over the world, the worldwide exchange of pallets becomes more and more a vital international trade issue which can foster as well as handicap the international exchange of goods. In the light of this impact of the wooden pallet on international trade, international standardization of pallets can be an important step in efforts to facilitate international trade and to enhance our trade opportunities in the worldwide market. Such international standardization and exchange of pallets must be a part of our national and international concern and policy, requiring unified action by industry and government and effective representation of our interests at international meetings and conferences.

Pallet Standardization

Pallet standardization has been accepted as a desirable objective provided that the standardization does not result in pallets of fixed designs and member sizes.

A continuing effort of the various pallet manufacturers associations, including NWPCA, has been to provide standard procedures for use in design. This has also been promoted by a number of government agencies and by the industries depending on pallets to store and move their products efficiently. Outstanding in these efforts have been the European national railroads which created the Euro Pool Pallet, shown in Fig. 3. In this country, developments directed toward pallet-size standardization may be cited. Such government agencies are involved as the U. S. Federal Supply Service (Figs. 4 and 5) and the U. S. Postal Service (Fig. 6) as well as certain food industry groups, including the Grocery Manufacturers of America (GMA), Food Marketing Institute (FMI), National-American Wholesale Grocers Association (NAWGA), and others. Seven associations formed the Grocery Pallet Council (GPC), which was disbanded during 1974. Its members promoted the standardization of mixed hardwood pallets (Fig. 7), southern pine pallets (Fig. 8), and west-coast softwood pallets (Fig. 9). Other industries who have attempted to standardize their pallets include the Glass Packaging Institute (Fig. 10), the Glass Container Manufacturers Institute (Fig. 11), and the Can Manufacturers Institute (Fig. 12). Hundreds of individual companies, such as Eastman Kodak (Figs. 13 and 15) and Kroger (Fig. 15), have issued specifications for pallets they wish to purchase. Almost none of the pallets bought by industry make use of all of the industry standards. The U. S. pallets are structures custom-fabricated for each buyer. To-date, attempts at standardization have been notable; yet, more or less unsuccessful for any aspects other than pallet sizes.

The recently formed Standards Committee MH-1 on Standardization of "Pallets, Slip Sheets and Other Bases for Unit Loads", under the auspices of the American Society of Mechanical Engineers (ASME), is set up under the 1979-approved Accredited Organization Procedure of the American National Standards Institute (ANSI) as successor of the American National Standards Committee MH-1 of same name. The MH-1 standardization efforts resulted in ANSI Standard MH-1.2-1978 on "Pallet Definitions and Terminology", MH-1.2.2-1975 on "Pallet Sizes", and MH-1.4-1977 on "Procedures for Testing Pallets", with MH-1.3.1 on "Pallet Sizes for Use with MH-5 Containers" and MH-1.5.1 on "Slip Sheets" in preparation and undergoing the consensus route.

The American Society for Testing and Materials (ASTM) Committee on Packaging (D-10) and its Handling and Transportation Subcommittee (D-10.22) has under revision "Standard Methods of Testing Pallets" (ASTM Designation D 1185-73).

The International Organization for Standardization (ISO) Committee TC 51 on "Pallets for Unit Load Method of Materials Handling" (founded during 1948), with its secretariat in the British Standards Institute (BSI), has several standards in the ballot stage. The proposed pallet-size standard ISO/DP/6780 on "Double-Deck Flat Pallets for Through Transit of Goods" was letter-balloted during June, 1979, and reverted back to TC 51. The Working Group on "Terminology Relating to Pallets" (51/WG 1) is revising ISO R 445 on "Vocabulary of Terms Relating to Pallets". The Working Group on "Performance Requirements and Methods of Test for Pallets" (51/WG 2) is drafting ISO standards on "Full-Scale Prototype Design Tests" and "Performance Requirements and Test Methods -- Quality Control". An ISO standard on "Fastening Test Methods" is under consideration.

ANSI MH-1 is the U. S. Technical Advisory Group (TAG) and voting member in TC 51 which has 23 voting members (11 West Europeans, 4 East Europeans, and 8 non-Europeans) and 14 observers (8 Europeans and 6 non-Europeans).

Recent meetings of 51/WG 1 and WG 2 took place in London, Vienna, and Paris. Two U. S. delegates participated in the London meeting (which was the first meeting in 19 years), while no U. S. delegate attended the Vienna meeting. The writer was the U. S. delegate at the Paris meeting. The most recent meeting took place near Stockholm, October 22-24, 1980, with no U. S. delegate participating. The recommen-

dations of these study and working groups are to be considered during the next TC 51 Committee meeting to be held in London, February 23-27, 1981.

During these ISO working group and committee meetings and the ensuing letter ballots, binding decisions are made. They determine the impact international standards will have on the economy of many countries which accept the ISO standards.

While the pallet terminology differs in different countries and even English-speaking countries, the U. S. terminology was recently accepted by 51/WG 1, in the light of the leadership of the U. S. in the pallet field.

However, when it comes to standard pallet sizes, they differ all over the world. The Euro Pool pallet, a nine-block pallet, used predominantly within Europe and for export from Europe, is 800 by 1200 mm (31½ by 47¼ in.) in size. The other European four-way basic standard pallet is 1000 by 1200 mm (39-3/8 by 47¼ in.) in size. The Japanese standard stringer pallet is 1100 by 1100 mm (43-3/8 by 43-3/8 in.) and their standard block pallet is 800 by 1100 mm (31½ by 43-3/8 in.). On the other hand, more than one-third of the pallets produced in the U. S. during 1979 were 1219 by 1016-mm (48 by 40-in. or 40 by 48-in.) pallets. Other common U. S. sizes are 813 by 1016 mm (32 by 40 in.); 1067 by 1219 mm (42 by 48 in.); 1067-mm (42-in.) square; and 1219-mm (48-in.) square. All other pallet sizes amount to less than 50 percent of the total U. S. production. Thus, we have a few major pallet sizes which are used predominantly in their places of origin as well as worldwide for export purposes.

If a developing country accepts one or several of these standard sizes as its standards, this country automatically puts itself in a favorable position with that continent which uses the pallet sizes selected as the country's standards. This is particularly the case, because the present ISO draft for pallets of standard sizes recognizes the U. S. pallets as interim standard pallets of non-metric dimensions only in those countries where they are presently used. Similarly, the proposed ISO test requirements and performance criteria may differ from U. S. requirements significantly enough to eliminate the U. S. pallets from use in international commerce. The impact of such happenings on the U. S. economy can be of a magnitude of the highest order, if merchandise shipped on American pallets will not be handled in foreign countries and ports because the American pallets do not meet ISO requirements.

At this time, an international convention is being proposed and planned in Geneva to standardize international transportation of perishable foods under the auspices of the Economic Commission for Europe (ECE) within the United Nations. This activity may take advantage of existing French standards for transporting perishable foods. This is just another related case where active U. S. representation by technical experts in the handling of palletized goods is of vital importance in our efforts to maintain and increase exports to markets all over the world.

Required Action

It must be our effort to foster and influence international pallet standardization in the light of the significant impact pallets and containers can have on efforts to enhance U. S. trade opportunities in world commerce. The relevant manufacturers and their trade associations (the private sector) as well as the U. S. government agencies (the public sector), which are responsible for U. S. trade abroad, will have to sponsor and fund representation by U. S. specialists in international activities which influence international standardization. Without such a strong impetus and active involvement, the U. S. participation in international

commerce will be severely handicapped and limited and the U. S. leadership will be superseded by others who make all-out efforts to be of maximum influence in the development of international standards.

References

- 1) Stern, E. George. July, 1977. Overview of Pallet Research --- 1977. Presented at 21st Annual Wooden Pallet and Container Manufacturing and Sales Promotion Clinic at the Lodge of the Four Seasons at Lake Ozark, Missouri, June 27-29, 1977 (13 pages). Virginia Polytechnic Institute and State University, William H. Sardo Jr. Pallet and Container Research Laboratory, Blacksburg, Virginia 24061.
- 2) ———. November, 1977. The Status of the Pallet Throughout the World. Ibidem. Bulletin No. 153 (20 pages).
- 3) ———. August, 1978. Stiffness and Rigidity of 48 by 40-In. Nailed Pallets of 22 Southern Hardwoods. Ibidem. Bulletin No. 158 (48 pages).
- 4) ———. June, 1979. Standard Wooden Pallets. Ibidem. Bulletin No. 164 (16 pages).



Fig. 1.- Typical non-reversible, double-face, flush, four-way, notched three-stringer, 48" by 40", hardwood, warehouse and exchange pallets after multiple uses in moving merchandise.

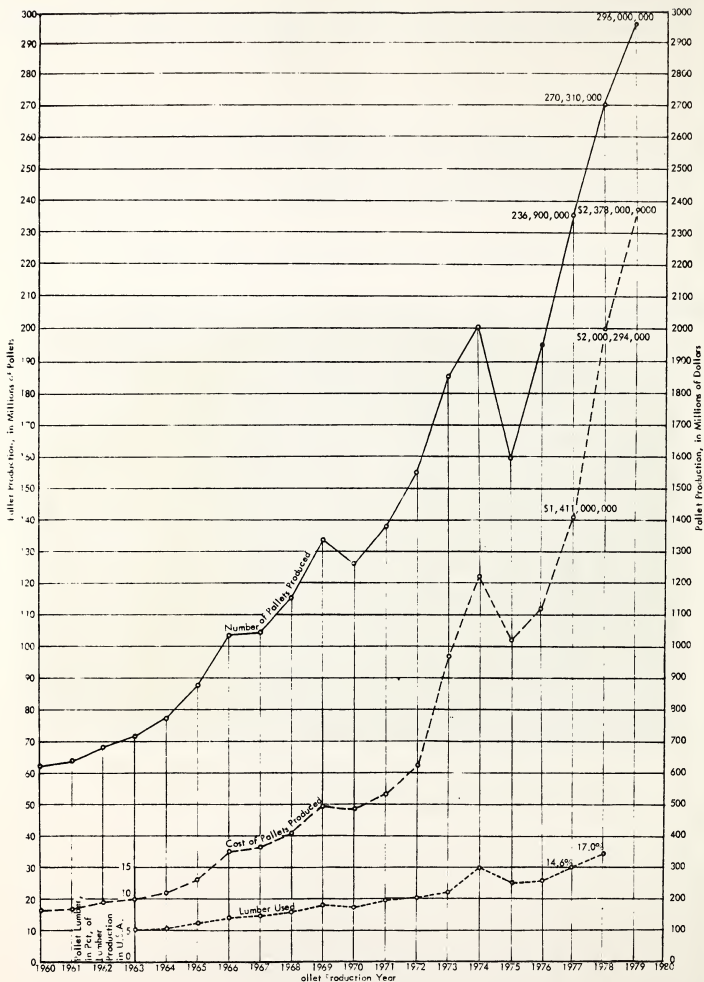


Fig. 2. - U.S. National Pallet Production Statistics for the Years 1960 to 1979, according to National Wooden Pallet and Container Association.

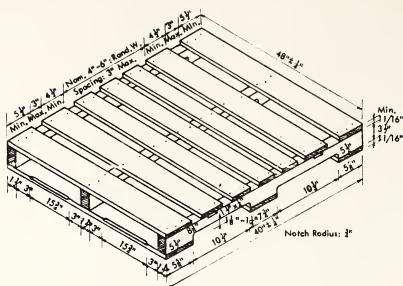


Fig. 4. — Double-face, non-reversible, flush, four-way entry, 40" by 48", hardwood, US GSA Federal Supply Service pallet (NN-P-71C), Type III, Size 2, Species Groups III and IV), September, 1973.

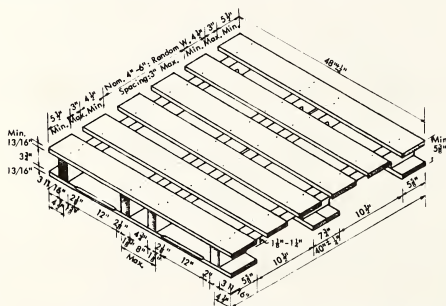


Fig. 5. — Double-face, non-reversible, double-wing, four-way entry, four-stringer, 40" by 48", hardwood, stevedore, US GSA Federal Supply Service pallet (NN-P-71C, Type V, Size 2, Species Groups III and IV), September, 1973.

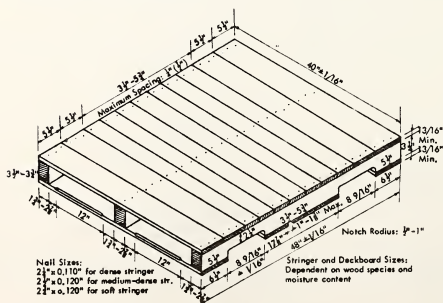


Fig. 6. — Double-face, non-reversible, flush, four-way entry, 48" by 40", soft or medium-dense or dense species, solid-deck, United States Postal Service pallet (USPS-P-756 B (R&DD)), October, 1975.

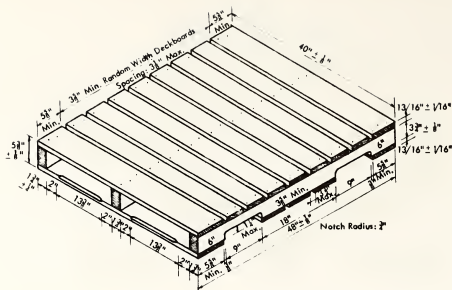


Fig. 10. — Double-face, non-reversible, flush, four-way entry, 48" by 40", hardwood, Glass Packaging Institute Standard Pallet (PD-100), August 21, 1978.

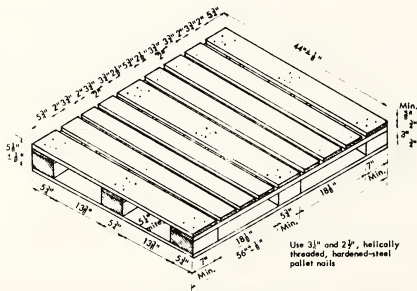


Fig. 11. — Single-face, non-reversible, flush, four-way entry, nine-block, 56" by 44", hardwood, bulk glass-container pallet by Glass Container Manufacturers Institute (PD-110), June, 1972.

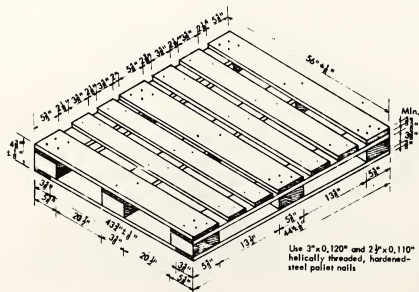


Fig. 12. — Single-face, non-reversible, flush, four-way entry, nine-block, 44" by 56", hardwood, empty-can storage and shipping pallet by Can Manufacturers Institute, May, 1974.

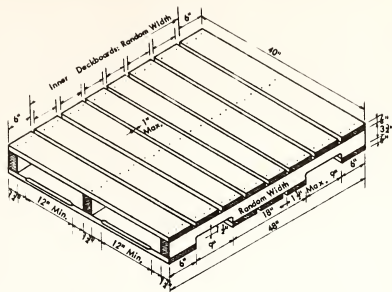


Fig. 13. — Double-face, non-reversible, flush, four-way entry, 48" by 40", hardwood, Eastman Kodak Standard Open-Deck pallet, March, 1969.

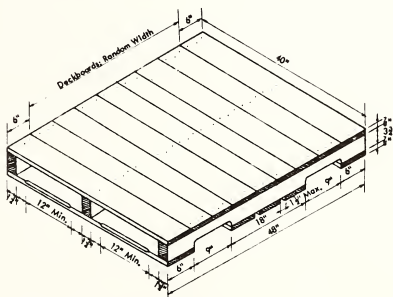


Fig. 14. — Double-face, non-reversible, flush, four-way entry, 48" by 40", hardwood, Eastman Kodak Standard Solid-Deck pallet, March, 1969.

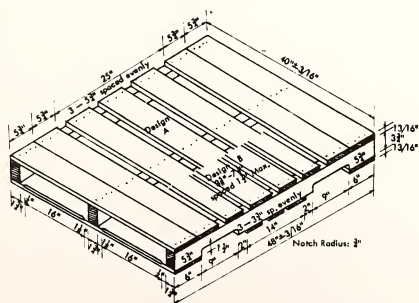
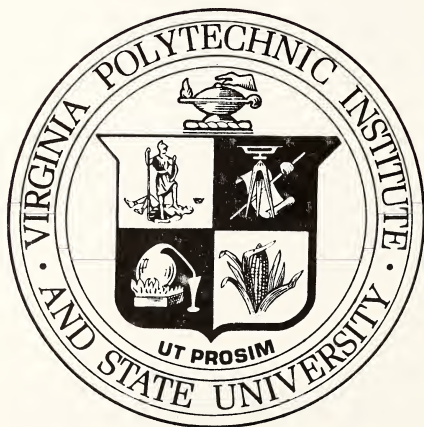


Fig. 15. — Double-face, non-reversible, flush, four-way entry, 48" by 40", hardwood, Kroger Company pallet, May, 1969.

APPENDIX

References

OVERVIEW OF PALLET RESEARCH --- 1977



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
WOOD RESEARCH AND WOOD CONSTRUCTION LABORATORY
William H. Sardo Jr. Pallet and Container Research Laboratory

BY E. GEORGE STERN, RESEARCH PROFESSOR
BLACKSBURG, VIRGINIA JULY, 1977

THE STATUS OF THE PALLET THROUGHOUT THE WORLD

Eight National Reports Presented
During The Third World Pallet Congress
at Virginia Polytechnic Institute and State University



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
WOOD RESEARCH AND WOOD CONSTRUCTION LABORATORY
William H. Sardo Jr. Pallet and Container Research Laboratory

BY E. GEORGE STERN, RESEARCH PROFESSOR
BLACKSBURG, VIRGINIA NOVEMBER, 1977

NO. 153

STIFFNESS AND RIGIDITY OF 48" BY 40" NAILED PALLETS OF 22 SOUTHERN HARDWOODS



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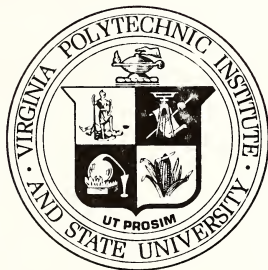
BY E. GEORGE STERN, RESEARCH PROFESSOR
BLACKSBURG, VIRGINIA

AUGUST, 1978

No. 158

Price: \$5.00

STANDARD WOODEN PALLETS



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
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BLACKSBURG, VIRGINIA

JUNE, 1979

No. 164
Price: \$3.00

An International Performance-Based
Standard Method of Developing
National Product Specification Standards
C. T. Mahaffey
80/9/2

PURPOSE, SCOPE AND OBJECTIVE

The purpose of this paper is to describe and recommend consideration of a method that coordinates the national and international application of the ISO¹ concept of three levels of standards.²



SYSTEM OF LEVELS OF STANDARDS FOR
BUILDING AND CIVIL ENGINEERING

LEVEL 1

FUNDAMENTAL STANDARDS

General principles and fundamental standards for buildings and civil engineering structures

Example: Definitions, Principles of Modular Coordination, Application of SI Metric Units etc.

LEVEL 2

WIDE RANGING STANDARDS

Standards for groups of products concerning preferred dimensions, performance requirements, general test methods etc.

Example: Windows, Doors, Flat Structural Panels, etc.

LEVEL 3

SPECIFIC STANDARDS

Descriptive standards for specific building products, materials or components concerning properties, test methods etc.

Example: Wood casement windows, interior steel doors, asbestos-cement sheets, etc.

This proposed method pertains directly to the cooperative international development of wide-ranging ISO level 2 performance standards and related test methods--for products grouped according to their intended end-uses--for the purpose of guiding and coordinating the subsequent development of national, level 3 specification standards for each alternative nationally-manufactured product that can be classified within such end-use groupings.

The objective of this proposed method of applying the ISO concept is to enable each participating nation to separately produce more useful national product specification standards that are internationally comprehensible and to promote a complementary relationship between ISO and each related national standards generating institution.

¹ ISO--International Organization for Standardization

² Statement of ISO Policy in the Field of Building (Geneva, 1976 ISO/TD3--26 Rev.). "This system of levels of standards was established in order to secure close cooperation among individual technical committees in the sense that a standard on a certain level must always conform with related standards on a more general level."

BACKGROUND¹

Alternative products within such groupings as windows, doors, sanitary drain pipes, flat structural panels, etc., are usually made of differing materials or are manufactured in such differing ways that they have significantly different in-place performance properties. Comparable measurements of these differing properties are needed if each of the alternative products involved are to be used wisely.

Presently, it is unusual to find either comparable or consistent measurements of in-place performance properties among end-use groupings of national product specification standards. Where national attempts at such measurements are made they are seldom technically related to similar measurements in the standards of other countries. Unless in-place performance-simulation measurements are provided in standards, the selection of the most suitable product for particular applications from among competing alternative products by designers, and the approval of such selections by government regulatory officials, must now be made either on the basis of performance claims of competing manufacturers (which are seldom comparable technically), or on the scope of the personal experiences of designers or regulators with each of the several products in each end-use class (which may not be very comprehensive).

The different materials involved, the different manufacturing methods employed, and the various approaches to standards development presently used within and among nations could lead one to believe that an international reconciliation of such national standards would be almost impossible to achieve. However, the use of level 2 wide-ranging, performance-based ISO standards, for products grouped according to end-use applications, could lead the way to a new era of extraordinarily useful nationally-developed product specification standards.

APPLICATION

As an example, in the functional areas encompassed by the term "windows," the ISO level 2 performance standard for windows would be developed so as to act as a coordinating guide for subsequent use by level 3 national window specification standards committees, by identifying:

(a) Each of the several important functional purposes that all windows are expected to serve (such as thermal conductivity, ventilation capacity, etc.) and each of the major in-place environmental conditions that windows are expected to resist (such as corrosion resistance, fire resistance, etc.) and for which performance measurements are to be supplied in all national specification standards for particular types of windows.

(b) The test methods or other evaluative techniques that are to be used to uniformly measure and express nationally-selected values for each performance item identified in (a) above.

The nations participating in the development of such level 2 ISO standards may find it useful to selectively include ranges of numerical values for certain performance properties identified in (a) above, particularly where the international identification of classes or grades of products was considered important. However, in many cases, it would not be essential and may not be considered necessary for ISO

¹ The method proposed in this paper is based on a method described in a paper entitled "A Suggestion for the Development of Performance Product Specifications and an Adequate Corresponding Committee Structure" (ISO/STACO 71 Rev.) prepared for ISO in 1978 by Leif Norgard of the Danish Standards Association.

committees to establish numerical values for any of these performance properties, although recommended ranges may prove useful. Rather, these values could be provided by the individual, material-oriented, product specification committees operating within the participating nations. This means that standard values would continue to be established at the national level in accordance with customary national manufacturing or marketing practices and could be more or less than those recommended in the ISO standard, but the values would now be fully comprehensible not only nationally but also internationally.

Each related, nationally-developed, product specification standard would be expected to provide measurements for each of the performance properties listed in the ISO level 2 standard, using the test methods identified therein. These standard data would be in addition to the usual inclusion of critical product dimensions, available shapes and sizes and other pertinent information peculiar to the particular type of product involved.

The application of this proposed method could be expected to beneficially affect national and international standards-related activities in the following areas:

1. Complementary National and International Standards Relations

On reflecting upon the implications suggested by this proposed product standards development method, it can be seen that its use would establish not only a national and international technical comparability among standards for alternative products produced at the national level but would advance harmonious relations between the sponsoring national standards organizations and the ISO. In the field of product standards ISO would not become a competitor of the standards bodies of participating countries. In fact, the efforts of ISO and the national standards organizations would become complementary. It is important that this relationship be strengthened because national differences in the performance properties of alternative products are likely to continue for many years to come. This proposed method recognizes and encompasses these differences, but permits national expressions of these inherently different performance values to be technically understood at the international level. In so doing, the use of this method would not only establish a coherent technical relationship between the ISO standard and the large number and variety of related national product specification standards, but it would also indicate naturally compatible roles for the ISO and participating national standards generating organizations.

2. Internationally Standardized Product Data

Through the national utilization of ISO level 2 performance guide standards, national product standards committees would be able to convey not only more complete but also comparable data concerning the in-place performance of the products involved. Presently, individual specification standards for competing products do not usually present data about all of the critical in-place performance properties needed by users of the product. In fact, many current product specification standards seem to present data that are more useful to in-plant quality control personnel than to designers, builders or government officials. For example, users with a domestic water supply problem would find it of little value to be informed by a standard that a pipe under consideration will withstand a hydrostatic pressure of 2800 kPa for 90 seconds, when the most usual installation problem deals with pressures no greater than the 500 kPa for a period of 40 years. When several national committees dealing with alternative products actually do address in-place performance properties they seldom have the opportunity to make use of common properties or common test methods. As a result, the data generated are often neither technically adequate nor

comparable, neither within nor among nations. Presently it is usually impossible to select, accurately, the most suitable product for a particular application based on the technical data in the standards involved. However, if these independent national standards committees would all use the agreed ISO international standards for the performance properties to be measured and the related test methods to be used, the related national product specification standards would all contain meaningful and technically comparable data--within and among nations--and without the need for any outside monitoring.

Such a facility for presenting meaningful, comparable performance data would be particularly useful to manufacturers concerned about the wise and unwise use of their products, especially where innovative products are being introduced.

3. Performance Evaluation Techniques

By concentrating international attention on the selection of the most appropriate test methods or other performance evaluation techniques, the use of this proposed method could be expected to generate significant improvements in the in-place performance-simulation quality of such evaluation measurements. This improvement in quality should also have the singular effect of reducing the number and variety of methods now in use. In those instances where none of the existing evaluation methods are deemed adequate, specific information regarding the type of test method needed, the context in which it would be used, and the urgency of the need could be provided by ISO to such prestandardization research organizations as RILEM¹ and CIB.² A much quicker response from such organizations could be expected as a result of this closer, clearer working relationship.

4. International Trade

Through the guidance provided by the ISO performance standard, related national product specification standards would become major instruments in advancing international trade in such products. Since all such standards of the participating nations would be measuring the same properties in the same manner, it would be much simpler for potential users of the products--whether designers, marketing distributors, or government regulatory officials--to evaluate the suitability of imported products for particular applications. This would be accomplished mainly on the basis of the internationally comprehensible data in the related national standards. Additionally, if the performance properties identified in the ISO standard were indexed or positioned in an agreed order, and if these indices or positionings were adopted at the national level, translations of these various national standards might not always be required in order to comprehend the data they contain.

5. Laboratory Accreditation

The national use of internationally agreed test methods, advanced by this proposed method, could be expected to greatly simplify the national accreditation, and the international acceptance, of product testing and certification organizations. It could also extend the operational range of such organizations. Because these organizations in the participating nations would all be using the same test methods, the development of laboratory accreditation

¹ The International Union of Testing and Research Laboratories for Materials and Structures.

² The International Council for Building Research Studies and Documentation.

criteria covering functional groups of products could be internationally standardized. In addition, any attendant national or international monitoring of the performance of accredited laboratories could be simplified greatly.

6. GATT Standards Code

Many of the preceding advantages connected with this method, when properly combined, could be of great value in simplifying adherence to the GATT¹ standards code by the signatory nations. National product standards and related certification activities involved--that would now be based on and made technically coherent by the international standard--could become promoters rather than barriers to trade in these products. The internationally comprehensible data generated by this proposed method, for end-use groupings of products, would be of great assistance to participating nations in avoiding technical errors regarding the exclusion of imported products that may fully meet legitimate domestic objectives. As an example, many nations are now mandating upper limits of the asbestos content of some products. If signatory nations utilize this proposed national/ international standards development method, asbestos and similar measurement problems resulting from misinterpretations of data derived from dissimilar test methods, can be avoided.

7. Intergovernmental Regulatory Harmonization Programs

The use of this proposed method would establish a technical basis for advancing intergovernmental regulatory harmonization efforts such as those now underway in the UN/ECE.² This proposed method would enable regulators to begin employing the common performance criteria and evaluation measurements in establishing national acceptance levels in regulations. As these new and possibly different--but now technically coherent--acceptance levels began appearing in national regulations, it would be much easier for manufacturers to more precisely determine mandated requirements that must be met in proposed marketing areas. Thus if national regulators were to mandate performance acceptance levels, utilizing these internationally agreed performance measurement techniques for functional groupings of products, manufacturers of those products could more easily determine where their products were acceptable or non-acceptable in specific applications in specific participating countries. In addition, manufacturers could more easily determine those performance property changes in the product that would be needed in order to cover or extend targeted marketing areas. Regulators would also benefit in that they could now proceed with implementing national policies while attaining the parallel goal of reducing obstacles to trade by being able to promulgate regulations having an internationally coherent standards base. This is the goal of the UN/ECE effort in the building field and its attainment would be greatly aided through the application of this proposed national-ISO product standards development method.

8. Technology Transfer

These technically coordinated national product specification standards could become powerful instruments for the transfer of technology to developing countries. The inclusion of comparable data concerning the critical in-place performance properties of alternative products among the product specification standards of the developed nations should be of great value to developing countries. Similar advantages would accrue from the international

¹ General Agreement on Tariffs and Trade.

² United Nations, Economic Commission for Europe, Working Party on Building.

identification of related sets of test methods that are to be used in the national development of product standards.

CONCLUSION

This proposed method is a logical extension and adaption of the ISO hierarchy of standards. It represents an exciting step in the evolutionary growth of a worldwide family of standards and standards developing organizations. It is hoped that ISO/TD3¹ will give favorable consideration to this proposal by recommending a carefully planned launching of an experimental standards development project, based on this proposed method, covering a group of products selected and volunteered for this purpose.

¹ Technical Division 3--Building

In ISO, Technical Divisions operate in specific areas in a manner similar to national standards management committees or boards.

THE UNITED STATES PHARMACOPEIA
AND INTERNATIONAL COMMERCE IN PHARMACEUTICALS

submitted for inclusion in the proceedings
of the
Department of Commerce Conference
on International Standardization
Washington, D.C.
October 15-16, 1980

by

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The author was formerly Chief of Pharmacology at the Medical Research Institute, Colombo and Chief Medical Officer, Biological Standardization at the World Health Organization, Geneva, and has also worked in other countries. He is familiar with world-wide usage of the United States Pharmacopeia and is interested in the USP from the "Standards for the World" viewpoint.

The size of the drug industry in the U. S. is not readily discernable unless actual figures and consolidated statistics are consulted. The 1977 Census of Manufacturers - Drugs issued by the Bureau of the Census shows that for 1977 the value of drugs, human and veterinary, including prescription and over-the-counter items, was nearly \$11.5 billion, constituting the output for the U. S. of 655 companies, employing over 125,000 persons with a total payroll of over \$2 billion. The value of these shipments over the years shows about a 50% increase in value every five years. The figures for the next census would be of interest, and there is no indication that the growth potential of the industry would not have advanced further. A vast export trade potential can be envisaged for drugs, devices, diagnostic materials and ancillary medical equipment of all kinds. It is common knowledge that drug companies with the largest capital are multinational, and that there is continued interest in developing and expanding the export market.

The control of quality of drugs, pharmaceuticals and medicaments, both in manufacture and of the final product, legally rests with the Food and Drug Administration, the responsible Agency under the law. The responsibility for determining the standards to which such articles should conform, and to ensure that they are formulated with adequate public participation and are fully available for public consideration, does not, however, necessarily belong to the FDA.

The United States Pharmacopeia is the legally recognized compendium of standards for drugs and pharmaceuticals in the United States of America by virtue of provisions in the Food, Drug, and Cosmetic Act, as amended, from 1938. It provides the definitive standards (basic measures) of strength, quality and purity of drugs as well as requirements for packaging and labeling and the methods of analysis by which to determine conformance. These definitive standards cover a large proportion of articles controlled through the Food and Drug Administration, including certain certifiable articles such as insulin and its dosage forms. The definitive standards for certain other certifiable drugs, such as antibiotics and antibiotic substances, and articles controlled through the Bureau of Biologics of the Food and Drug Administration, are those set out in federal publications. Where biologics and blood products are concerned, such standards-setting is under the authority of other legislation (the Public Health Service Act of 1944, as amended) even though the provisions of the Food, Drug, and Cosmetic Act do cover all articles used in human medicine.

In spite of this distinction between the responsibilities of the U. S. Pharmacopeial Convention, Inc., and the federal Food and Drug Administration of the Department of Health and Human Services, the U. S. Pharmacopeia (now incorporating also the National Formulary) nevertheless reproduces the standards of the articles that are purely federal responsibility as clearly and as fully as possible, including in many cases the descriptions of methods of tests and assays. The United States Pharmacopeia therefore presents in a single volume complete coverage of most articles now available in this country. It is hoped that by 1980 it will achieve the goal of providing coverage of practically every drug substance and dosage form, and a large number of devices and diagnostic materials used in the diagnosis, prophylaxis, treatment or alleviation of human disease. Thus, this independent, scientifically produced compendium¹ can be adopted as a comprehensive book of standards by any country which chooses to do so.

¹The United States Pharmacopeial Convention, responsible for publication of the United States Pharmacopeia since 1820, was incorporated in 1900 as a private, voluntary, non-profit body, with the objective of determining the drugs worthy of being prescribed and the standards of purity for them. Since 1975, however, the scope of the compendia has been extended to cover, eventually, all drugs and pharmaceuticals used in medicine. The Convention has been an active participant since 1902 in drug standards internationally, and has been associated with national, inter-governmental and other international bodies with this interest.

A question often asked is whether or not countries are willing to accept drugs and pharmaceuticals which conform to the standards set forth in the U. S. Pharmacopeia. It is undoubtedly a desirable policy for the U. S. to make every endeavor and be eager to have countries accept these standards. This would be not only owing to the degree of expertise of the book itself, but also for ease of laying down specifications in purchase and export/import documentation. It is surely far more convenient to specify "conformity with USP specifications" than to incorporate lengthy descriptions of the standards and criteria covering all aspects of quality desired. The present evidence is overwhelmingly in favor of the view that such acceptance already exists in large measure. Many developing countries, in fact, have not the resources to set up their own standards for drugs, even if they were inclined to do so. From the information available, it is clear that many countries already accept the USP, either completely, in part, or in parallel with other similar publications. They in fact constitute a large proportion of the some 150 countries of the world. Owing to the completeness of coverage of the book, such countries are saved the necessity of consulting U. S. federal regulations, which may not be easily obtainable, or not be an acceptable form for drug standards on account of national political considerations.

A unique feature of the United States Pharmacopeia lies in the policy, wherever possible, for establishing tests and assays by comparison with an official Reference Standard. Use of these comparison standards allows a greater degree of freedom in formulating and manufacturing procedures, yet provides a fully satisfactory test of the finished product. The USP Reference Standards Program is the largest in the world, and covers over 90% of compendial drugs. Facilities can be negotiated for this program to provide importing countries with the necessary Reference Standards either as USP Reference Standards or in a form which the importing country can use with its own labeling and authority. Manufacturers and exporters of drugs will have the advantage of knowing exactly how their export items will be tested and the standards with which exact compliance will be required.

The U. S. as a signatory to the GATT Code would be a participant in the development and application of both treaty and non-treaty standards. Related U. S. legislation includes the Trade Agreements Act of 1979. Wherever the question of export of drugs is concerned, I believe that it is necessary for the federal government to take an official stand on issues relating to standards for drugs and related substances used in medicine. The USP Convention, as a non-governmental organization cannot directly take part in such international standards. It has also been the subject of many discussions and resolutions at the World Health Assembly, and governing bodies of other specialized agencies of the United Nations, to persuade exporting countries not to distribute drugs and pharmaceuticals which do not themselves meet the legal standards of quality of the country of origin. Some provisions to this end have been suggested for recent amendments to the Food, Drug, and Cosmetic Act. There have also been certain White House proposed procedures, to be established through executive order, to restrict the export of unapproved new drugs or hazardous drugs. The Export Administration Act of 1979 already provides for pre-export licensing for substances that may be detrimental to U. S. foreign policy interests. Specific provisions in legislative proposals suggest notification to the State Department where any export item does not meet existing standards, of the respects in which such article is not in compliance with the regulations, which will then inform the recipient country and obtain the consent of the latter that it would still be willing to accept the product in question.

The Health Research Group, a consumer-oriented organization in Washington, D. C., which is interested in many aspects of health care of national importance, recently pointed out that certain drug interests have promoted pharmaceuticals in Latin America and Europe for a wide range of conditions for which such usage does

not exist in the U. S. The Group called for export control of such items, and pointed out that authority was already available under that Export Administration Act of 1979 for the Administration to do so. Contrary opinion has been expressed as to the availability of such authority, but whatever may be the position, it is up to consumers in importing countries, physicians, pharmacists, patients or national authorities to decide to what use they are going to put these imports.

There is an important publication of the USP Convention, a sister volume to the U. S. Pharmacopeia, entitled USP Dispensing Information. This provides information to the physician and to the pharmacist on availability of dosage forms, categories of use, side effects, patient consultation and dosing information, as well as precautions to consider. There is a separate section in simple language for laymen that gives advice for the patient. Such information does not constitute mandatory standards for the use of drugs and dosage forms, but it is authoritative in that the best available expertise has been recruited by the USP Convention to compile it. It would be an adequate counter to misleading or incorrect promotional material, if such be distributed in an importing country, and where informed scientific opinion is insufficient or unable to make its own judgment on indications and contraindications for particular imported drugs and pharmaceuticals. Together, therefore, the United States Pharmacopeia and the USP Dispensing Information comprise an information source available to drug manufacturers, processors, regulatory agencies, physicians, pharmacists and patients alike which is authoritative, acceptable and used world-wide.

Summary of recommendations for actions by the U. S. Government and U. S. private sector entities in international standardization relating to drugs and pharmaceuticals.

- (1) If a federal government/private sector committee or corporation is formed for international standardization in relation to U. S. trade, it should be constituted so as to be able to deal with such questions for drugs and pharmaceuticals.
- (2) As a national policy, in compliance with requests of other countries as well as in the interests of U. S. trade, drugs and related articles for export should be in conformity with standards set for them in the U. S. Exceptions thereto may be allowable on the basis of negotiated acceptance between the U. S. and the importing country in each case.
- (3) The most feasible way to apply public standards for drugs in export trade would be to specify conformity with U. S. compendial standards, comprehensively published by the USP Convention. Importing countries can conveniently adopt any standards published in the compendia, irrespective of the fact that some of such published compendial standards reflect those of the federal Food and Drug Administration for certain types of medicinal and diagnostic substances.
- (4) Testing and certification are facilitated by the availability of USP Reference Standards for the majority of articles in the compendia, and testing services would cost less if used according to routinely used tests and assays than if such procedures had to be modified according to the requests of each importing country.
- (5) An extensive program to encourage acceptance of the U. S. Pharmacopeia in importing countries is not necessary, or at most would be minimal, since the USP is already known and largely used world-wide.
- (6) Updated information on the indications for, manner of usage, and contraindications to usage, of imported drugs is available in the publication USP Dispensing Information. Importing countries could therefore use such authoritative information where otherwise they would have to depend on uncontrolled promotional material.

(7) It should be part of U. S. national policy on the export of drugs and pharmaceuticals for regulations, contracts and export agreements to be based on compliance of exported articles with United States Pharmacopeia or National Formulary standards for identity, strength, quality and purity as well as for packaging and labeling; for exporters to encourage the availability and use of the compendia by importing countries; and for general recommendation of USP Dispensing Information in the use and applications of imported drugs.

(8) Multi-national drug manufacturers or U. S. manufacturers with extensive affiliates and subsidiaries in other countries will find the pursuance of policies based on the above recommendations both convenient and financially rewarding.

APPENDIX III

Letters received after the Conference from correspondents commenting on the Conference and requesting that their letters be added to the Conference record.

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MANAGEMENT DEVELOPMENT UNIT

Mr. Howard I. Forman,
Department of Commerce,
Washington DC,
U.S.A.

Your ref

Our ref KG/RO

Date 29 October 1980

Dear Howard,

I hope that you will find this brief paper interesting, and feel it is worthy of publication. Feel free to edit it along the agreed format.

My very grateful thanks for allowing me to attend what proved to be an interesting and stimulating conference.

Kindest regards,

Keith Gorton
Management Development Unit

1.0 Introduction

This paper is an unusual one, written from a different perspective from most of the delegates at the Conference organised by Howard I Forman at the Department of Commerce, Washington DC on October 15/16 1980. The Author, Keith Gorton, heads a team of staff at Hull College of Higher Education who are researching the role that standards play in overseas trade in general and the role that British Standards play in particular. The research programme has been in operation for around 18 months and has involved not only detailed work within the UK but also comparative analysis with standardisation procedures and attitudes within U.S.A.

2.0 An overseas view of the Conference

For the English, working with government is not seen to be as traumatic an experience as that implied by several delegates at the Conference. There is, of course, suspicion between private industry and government but no more than exists between individual companies within the private sector. It seems to us that there are some very positive advantages of government involvement, the main benefits being

- (i) A national interest approach to problems,
- (ii) A very lucrative source of funding.

But the UK is very small and we are able to clearly identify the body working on standardisation in the national interest - BSI. In America the onlooker should be forgiven for being confused. We visited America earlier in 1980 for a period of around 2 weeks and talked to many organisations and individuals concerned with standardisation in the US. We were impressed by the reputation of the various bodies involved in standardisation, ASTM, ASME, IEEE etc. but were confused about the role of ANSI. In my notes following this

earlier visit I concluded that America had still to work out the role that ANSI was to play - America would either increase the status and influence of ANSI or reduce it thus allowing the other bodies ASTM et al. to speak directly for their members in international work.

It seems that the feeling of the Conference was moving towards a system that would,

- (i) increase industry/government cooperation,
- (ii) increase the influence of ANSI,
- (iii) increase the role that America plays within the international standards arena.

The above system was felt desirable to give America a fighting chance of exporting more at a time when competition in international trade is higher and keener than at any time in history. The major question therefore, might be "To what extent will the various proposals effect the export performance?" Coincidentally, but obviously, this has been the key question in our research on BSI and the answers are not always those expected. The Conference was dominated by well qualified, experienced speakers but all suffered to some extent by the paucity of information relating export performance to standardisation activities. We conclude the data base needs revising and increasing substantially.

3.0 Information required

We believe that much more research/information is required to answer an assortment of basic questions e.g.

- 3.1 To what extent do standards affect overseas trade? Of course much of the research done by academic economists points to the influence that non-tariff barriers play in overseas trade but will not a market orientated company soon find the solution - manufacture the indigenous standard? There is a strong body of thought that concludes that standards never got in the way of trade for an organisation who really wanted to attack the market.

- 3.2 We are confronted with an hypothesis that claims that standards are too heavily production orientated and take very little notice of the consumer. To what extent are the views of international customers and major influences such as architects, consultants and other advisers considered when international standards are conceived? This questions the whole basis of international standards in an international trade context.
- 3.3 In high technology fields to what extent should the standards act as a forerunner, a predictor of technological development? Is there a definitive view on which comes first the technology or the standard?
- 3.4 Your conference highlighted, on several occasions, the problems of the small business. Particularly those small businesses which will be the major enterprises of the future. What is their view on standards, how can the national standardisation process encompass their views without a massive time/cost commitment from the small businessman himself?

The above four examples and many more require in depth research. Perhaps the first step should be to commission work in parallel and, perhaps, in conjunction with the work that we are doing in England. If this research was commissioned jointly by government and private industry it would test the abilities of the two entities to work together jointly to benefit the standards cause:

4.0 An offer of help

We are prepared to help in any way possible to generate a truly representative data base to ensure that decision making on international standards takes place on the basis of well informed and reliable information. Britain and the U.S. have a common bond and our joint reaction to the well organised and thrusting standards bodies of Germany, Japan and others is crucial. My organisation is committed to helping and welcomes that commitment from others.

Keith Gorton
Hull, October 1980



UNDERWRITERS LABORATORIES INC.

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an independent, not-for-profit organization testing for public safety

November 13, 1980

Dr. Howard I. Forman
Deputy Assistant Secretary for
Product Standards Policy
Room 3876
U. S. Department of Commerce
Washington, D. C. 20230


Dear Howard:

The following is supplied in response to your invitation for comments extended at the time of the October 15-16 Conference on International Standards Activities held in Washington, D. C.

These comments relate to the following statements contained on Page 6 of the paper, "Product Certification, and its Potential Impact upon International Trade", authored by Robert Peach of Sears, Roebuck and Allen Wilson of Electronics Industries Association:

"There remains a major area in which a third party is needed to provide the assurance mechanism. But since only the manufacturer is able to apply quality assurance principles for effective, continuous control, it becomes apparent that a third-party certification scheme is fundamentally a weak concept, even though it has potential in certain areas. Because of its limitations, easy prescriptions of third-party certification as an answer to product assurance should be avoided. Third-party certification is an available tool for proper application."

We do not agree that a logical conclusion can be reached that a "third-party certification scheme is fundamentally a weak concept" because of the stated premise that "only the manufacturer is able to apply quality assurance principles for effective continuous control." This conclusion ignores the fact that many third-party programs include provisions for monitoring or auditing the implementation of the manufacturers quality assurance measures.

Look For The  Listing or Classification Mark On The Product

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Such programs include a determination of the existence of a valid quality assurance system and sufficient monitoring to determine that the manufacturer is utilizing his program to assure conformity of the product to the standard. In our view, a third-party system that provides such monitoring is stronger than manufacturer self-certification which does not provide any audit by a third party.

As Messrs. Peach and Wilson recongize, there are various types of third-party certification programs. The ISO document entitled "Certification Principles and Practice" referenced in the Peach/Wilson paper identifies eight different types of third-party certification systems, as follows:

1. Type testing.
2. Type testing followed by subsequent surveillance through audit testing of samples purchased on the open market.
3. Type testing followed by subsequent surveillance through audit testing of factory samples.
4. Type testing followed by subsequent surveillance through audit testing of samples from both the open market and the factory.
5. Type testing and assessment of factory quality control and its acceptance followed by surveillance that takes into account the audit of factory quality control and the testing of samples from the factory and the open market.
6. Factory quality control assessment and its acceptance only.
7. Batch testing.
8. 100% testing.

As can readily be seen, it is improper to make generalizations regarding the role of the manufacturers quality assurance programs in third-party certifications.

Accordingly, we believe it is important to have the record show that all third-party systems are not identical and that third-party systems which include means for the surveillance of continued production through a proper

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combination of audit testing of on-going production and monitoring of the manufacturers quality assurance measures provides a level of assurance of product conformance to standards not available in other forms of certification.

Cordially,



DEREK BARTON
Senior Vice President

cc: Robert Peach
Allen Wilson



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November 13, 1980

Dr. Howard I. Forman
Deputy Assistant Secretary for
Product Standards Policy
Room 3876
U. S. Department of Commerce
Washington, D. C. 20230

Dear Howard:

In our view, the DOC Conference on International Standardization held on October 15-16 was very worthwhile and succeeded in surfacing and airing a number of issues and problem areas.

During the "Wrap-Up" session, it was suggested that four possible courses of action should be considered for placing the United States in a better posture to respond to and participate in international standards activities. Those enumerated were:

1. Adoption of a system similar to the one used in Germany (DIN).
2. Adoption of a system similar to that used in Canada. (Standards Council of Canada)
3. Implementation of the proposal contained in the Report of the International Standards Council Working Group on Revision of the ANSI International Standards Structure. (The "Podolsky Proposal")
4. The establishment of a quasi-public corporation by Federal legislation, i.e., the concept of an American International Standards Institute. (The "Forman Proposal")

It was also suggested by some speakers that no drastic change should be made in the present system, but there was recognition that ANSI should be strengthened and mechanisms should be developed for cooperation between the elements of the private sector and the private sector and government.

Look For The  Listing or Classification Mark On The Product

- 2 -

At the close of the meeting you asked that participants express their views regarding possible courses of action.

UL has been actively involved in international standards activities since 1966. We feel that substantial progress has been made and continues to be made working through the existing mechanism provided by ANSI as the member body of ISO and ANSI/USNC as the member body of IEC. Admittedly, improvements can be made in any system.

One of the issues of prime concern appears to be that of funding representative participation. Support by the Federal Government is indicated, provided such can be granted without accompanying Federal control which so frequently results when aid is given.


It is recognized that the Federal Government has responsibilities under the GATT Code as expressed by the Trade Agreements Act of 1979. In view of this, representatives of the Federal Government should be able to take an active role in the development of U.S. positions and participation in voluntary international standards activities.

We believe the above objectives can be achieved without adopting Federal or quasi-Federal systems of the type existing in other countries such as Germany and Canada; or the type of organization envisioned by your proposal for a quasi-public corporation established by Federal legislation, e.g., the concept of an American International Standards Institute (AISI).

While the concept is yet to be fully explored and recognizing the likelihood that some changes will be necessary to be satisfactory to the organizations and interests concerned, we favor the general approach contained in the Report of the International Standards Council Working Group on Revision of the ANSI International Standards Structure (The "Podolsky Proposal").

We feel that adequate time should be allowed for interested parties to thoroughly consider the ramifications of this proposal and the further development of changes considered necessary to permit the United States to effectively participate in international standards activities.

Cordially,


DEREK BARTON
Senior Vice President

cc: Dr. Leon Podolsky



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BUILDING SCIENCES

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November 25, 1980

Dr. Howard I. Forman
Deputy Assistant Secretary for
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Dear Dr. Forman:

Those of us at the National Institute of Building Sciences (NIBS) who attended the October 1980 conference "International Standardization, Testing, Certification and Related Matters, and Their Implications Under Trade Agreements Act of 1979" were impressed by the quality of the materials presented and would like to express our appreciation to you for making the conference a reality.

This letter is submitted as commentary to be included in the published conference proceedings.

We noted with interest that Dr. LaQue, in the appendix to his paper, cited NIBS as an organizational model for bringing about government/industry cooperation and coordination in international standards development.

As you know, the Institute was created by the Congress, as a private, non-profit, authoritative national source of leadership in the area of building science and technology and its use to improve criteria, standards, and the regulatory process. By virtue of its unique position and structure, the Institute is able to bring together and represent all interests in the building community, including consumers.

Specifically, the Institute's authorizing legislation (P.L. 93-383) states:

"The Institute shall exercise its functions and responsibilities in four general areas, relating to building regulations as follows:

(A) Development, promulgation, and maintenance of nationally recognized performance criteria, standards, and other technical provisions for maintenance of life, safety, health, and public welfare suitable for adoption by building regulating jurisdictions and agencies, including test methods and other evaluative techniques relating to building systems, subsystems, components, products and materials with due regard for consumer problems.

(B) Evaluation and prequalification of existing and new building technology in accordance with subparagraph (A).

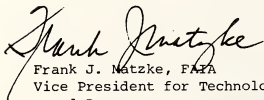
(C) Conduct of needed investigations in direct support of subparagraphs (A) and (B).

(D) Assembly, storage, and dissemination of technical data and other information directly related to subparagraphs (A), (B) and (C). The Institute in exercising its functions and responsibilities shall (A) give particular attention to the development of methods for encouraging all sectors of the economy to cooperate with the Institute and to accept and use its technical findings, and to accept and use the nationally recognized performance criteria, standards, and other technical provisions developed for use in Federal, State, and local building codes and other regulations which result from the program of the Institute; (B) seek to assure that its actions are coordinated with related requirements which are imposed in connection with community and environmental development generally; and (C) consult with the Department of Justice and other agencies of government to the extent necessary to insure that the national interest is protected and promoted in the exercise of its functions and responsibilities."

The authorizing legislation also provided for the Institute's Consultative Council as a mechanism for ensuring continuous representation and participation of all interests, public and private.

By virtue of the Institute's functions and responsibilities and unique structure and position, it follows that NIBS is an excellent candidate to become the "Private Sector Standards Coordinating Center" identified in the National Policy on Standards, for the vast building construction sector of the economy.

Sincerely,



Frank J. Matzke, FAIA
Vice President for Technology
and Programs



COLUMBUS MCKINNON CORPORATION

TONAWANDA, NEW YORK 14150 • 716 696 3200

December 5, 1980

Dr. Howard I. Foreman
Deputy Assistant Secretary
for Products Standards Policy
Room 3876
U.S. Department of Commerce
Washington, D. C. 20230

re: Post Conference Comments
for International Standardization
Meeting of October 15 and 16, 1980.

Dear Dr. Foreman:

As a representative to this conference for Columbus McKinnon Corporation, I should like to compliment both you and the Department of Commerce on the excellent in-depth coverage that was provided at the subject conference. Both the International Standards Policy and the Internal Consensus Standards Policy of the United States are extremely important to our company's well-being. We have endeavored to contribute actively and aggressively to both with both financial and personnel support. We feel that only by doing this can we truly reap its benefits and justify recognition of our contributions to it.

Our greatest concern with the present Consensus Standards System, both within the United States and Internationally, is the almost casual manner in which adherence to the principle of "Performance Standards" is required. Both the OMB Circular A119 and the CFR Part 19 that implements it, as well as ANSI criteria, call for standards to be of a performance type. However, in both cases, the requirement is couched in such general language that technically oriented committees can easily justify deviation. The "Performance Standard" concept ought to be worded to assure that adequate development and/or long usage of a product cannot be overlooked. Columbus McKinnon would be pleased to cite specific examples of this serious shortcoming for the help of future reorganization and redirection of the Consensus System when it is appropriate to do so.

Regarding the prime objective of the conference, Columbus McKinnon does have a specific recommendation to the Department of Commerce for future implementation of a system for both internal and international standards processing. As a result of our broad past experience in participation of both areas of standardization, we would recommend consideration be given to the ANSI approach as outlined in their "Report of the International Standards Council Working Group on Revision of the ANSI International Standards Structure." Because this report is based upon the good features of our present U.S. system which has served us so well, we believe it will provide the best approach to a satisfactory system that can embody all the checks needed under "Trade Agreements Act of 1979."

Mr. Howard I. Foreman
U.S. Department of Commerce
December 5, 1980

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If we can be of further help, please advise. We should also like to be able to follow the continued progress which results from this excellent conference.

Sincerely,


Harold V. Hawkins, P.E.

HVH:cf



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December 12, 1980

Dr. Howard I. Forman
Deputy Assistant Secretary for
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U. S. Department of Commerce
Washington, D. C. 20230

Dear Howard:

You have received a letter from Derek Barton of Underwriters Laboratories commenting on the paper given by me and Allen Wilson at the Conference on International Standards held in Washington, D.C. on October 15-16. I can understand Derek Barton's point of view as to the relationship of third party surveillance to a factory's quality assurance system, and included the strong reference to Underwriters Laboratories because of its unique position in the voluntary standards scene.

Our statement "only the manufacturer is able to apply quality assurance principles for effective, continuous control" was included because it is a fundamental principle with which quality control professionals work. The principle even applies within factories, for no staff quality control activity is able (nor should) take away from production units the responsibility for quality, even though staff activities may properly monitor or audit the systems and products coming from the production unit.

Quality control is a continuous requirement, with hour-by-hour and day-by-day control often being necessary. No third party, be it Underwriters Laboratories or Sears, Roebuck and Co. can provide assurance to the degree possible by the production unit itself. Of course, U.L., in the course of its duties, looks for evidence that the necessary degree of continuous control exists, and will continue between surveillance visits.

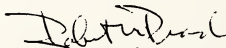
A highly-motivated, quality conscious manufacturer that establishes and administers effective controls in its production units can provide a product significantly superior to that from an unmotivated company that follows only minimum requirements, even though it is surveyed periodically by a third party. I realize that the purchaser is seldom able to judge true factory motivations, so, for important quality characteristics,

Dr. Howard I. Forman - Page 2
December 12, 1980

particularly those that are safety related, there is often no alternative to third party involvement. Nonetheless, the surveillance systems that Sears finds it necessary to operate to provide assurance of quality to our buyers are inferior to plans in which manufacturers have essentially self-certified their product, doing so by means of total systems which result in consistently high product quality.

Put another way, our staff seldom needs to visit the factories of certain suppliers, because of the confidence that we have developed in their total capabilities. Some other plants need constant surveillance. While after a surveillance visit we can report to our buying staff that all things are in order, frequent visits are unquestionably less desirable than having confidence without the need of such visits.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'R. W. Peach', written in a cursive style.

R. W. Peach
Manager
Quality Division
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RWP:dm

cc: Derek Barton
Allen Wilson

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APPENDIX V

DESIGNING THE CONFERENCE

DESIGNING THE CONFERENCE

I.

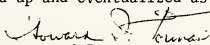
In designing the Conference the following basic decisions were made by me:

1. The Conference would run for two full days.
2. The first day and one-half would be devoted to the presentation of eight previously prepared papers, each in a maximum time period of 30 minutes.
3. A question-and-answer period of 30 minutes would follow each presentation.
4. The second half of the second day would be devoted to a free and open discussion of anything that preceded that session.
5. The selection of topics and speakers would be left entirely up to a Steering Committee which, apart from its chairman, would be made up exclusively of private sector personnel. The Steering Committee would be provided with a group of Federal Government Advisors to answer questions and make suggestions, as appropriate.
6. The members of the Steering Committee were chosen as follows. I selected six persons at random, based upon their background of experience in international standardization and because of their having been recommended by ANSI, ASTM and other standards organizations whom I solicited for suggestions. The remainder were volunteers who, learning of the proposed Conference, asked to be included in its planning group. No one who made such a request was refused. The members of the Federal Government Advisors group were selected by me.

II.

The Steering Committee, along with the Federal Government Advisors, met for one full day on June 24, 1980 in the Main Department of Commerce building in Washington. Prior to that meeting I sent each of them a list of 18 suggested topics or issues for their consideration as possible Conference program items. Those topics were, in the main, drafted by me and were based largely on questions that suggested themselves on close study of the provisions of Title IV of the Trade Agreements Act of 1979 as needing clarification. The Committee reviewed and commented upon the topics. By the end of these deliberations the list of suggested program items had grown to 33. It was proposed and agreed that the Committee would reflect on the 33 topics, rank them on a scale of 1 to 10 in the order of highest priority in terms of importance, and notify the chairman of their rankings. At the same time, the members would notify the chairman and persons whom they recommended to be sought as speakers for those topics. The chairman would then arrange for a sub-group of the Committee to review the rankings, the suggested speakers, and to finalize the program.

The sub-group chosen consisted of Messrs. Fleckenstein, Goodemote, LaQue, Podolsky, Underwood, and Wilson, plus the chairman. They met in the Department of Commerce on July 29, 1980, reviewed the rankings and suggestions for speakers, and made the choices which were firmed up and eventualized as the Conference program.


Howard I. Forman

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